

THE MODERN PRINCETON

CHARLES G. OSGOOD

CHRISTIAN GAUSS

HUGH STOTT TAYLOR

ROBERT K. ROOT

DONALD DREW EGBERT

WALTER E. HOPE

CHAUNCEY BELKNAP

PRINCETON

PRINCETON UNIVERSITY PRESS

1947

1
COPYRIGHT, 1947, BY PRINCETON UNIVERSITY PRESS
LONDON. GEOFFREY CUMBERLEGE, OXFORD UNIVERSITY PRESS
4

PRINTED IN THE UNITED STATES OF AMERICA BY
PRINCETON UNIVERSITY PRESS AT PRINCETON, NEW JERSEY

Foreword

THE writing of this book has been undertaken as a labor of love by seven members of the Princeton family. The volume does not seek to give a comprehensive history of the modern Princeton, or to tell a chronological narrative. Rather, it attempts to deal in essay form with important segments of Princeton life as they have developed since the Sesquicentennial Celebration of 1896, and as they appear in the year of Princeton Bicentennial. This is not in any sense a formal history, and the book is thus quite different in character from *Princeton 1746-1896*, the scholarly and documented account of Princeton's first 150 years which has been written by Thomas Jefferson Wertenbaker. The more recent years, likewise, will have their definitive treatment when time has given perspective to the period through which we are now living. In the meantime this book is an informal—in part an impressionistic—review of Princeton's aspirations, problems, and accomplishments during the last fifty years.

Although the authors would wish it to be understood that this is not a scholarly book in the sense used above, the fact remains that five of the seven authors are distinguished Princeton scholars, and the two others are Princeton alumni whose effective support of Princeton scholarship has been unailing through the years. The authors are among the best known Princetonians, but for the benefit of readers of this book *in partibus infidelium* the seven men may be briefly identified as follows:

CHARLES G. OSGOOD is Holmes professor of belles lettres, emeritus, and a student of Spenser, Johnson, Shakespeare, and other figures in English literature; a special interest is his study of the relation between English literature and the classics. He is a graduate of Yale and has been a member of the Princeton faculty since 1905 when he was called here as a preceptor by President Wilson.

FOREWORD

CHRISTIAN GAUSS is dean of the college, emeritus, and Class of 1900 professor of modern languages, emeritus. He also has the honor, unique in Princeton history, of having been designated "Dean of the Alumni" by formal action of the Graduate Council. He is national president of Phi Beta Kappa. His scholarly work has dealt with Rousseau, Flaubert, European cultural history, and the philosophy of civilization, his books and magazine articles on education are familiar to a wide audience, especially to parents of college students. Both in his official capacity as dean of the college and because of his personal interest, Dean Gauss has been closer to undergraduate life during the past four decades than any other member of the faculty. He is a graduate of Michigan and came to Princeton in 1905 as one of President Wilson's "preceptor guys."

HUGH STOTT TAYLOR is dean of the Graduate School and is David B. Jones professor of chemistry. He has been chairman of the Department of Chemistry since 1926. He received undergraduate and graduate degrees at Liverpool University and studied in Continental laboratories before coming to Princeton in 1914. Physical chemistry is his chief field of investigation, but he has engaged in a wide variety of scientific projects and has played an active part in organized science.

ROBERT K. ROOT is dean of the faculty, emeritus, and Woodrow Wilson professor of English literature, emeritus. He has published major scholarly works on Chaucer and Pope. His course in eighteenth century literature was for many years a popular fixture of the curriculum, and his introductory course in philology was known to several academic generations as "Root's Roots." He is a graduate of Yale and was called to Princeton in 1905 by President Wilson.

DONALD DREW EGBERT is professor of architecture and as a hobby has made himself an authority on Princeton history. He

FOREWORD

graduated from Princeton in 1924 and has been a member of the faculty since 1929. He is curator of American art in Princeton's *Museum of Historic Art*. At the direction of a committee of the trustees, Mr. Egbert has recently completed an extensive scholarly study of all portraits, in sculpture and painting, owned by the University. The results of this study will be published in a large illustrated volume in the near future.

WALTER E. HOPE is chairman of the executive committee of the board of trustees, of which he has been a member since 1919. He is a graduate of Princeton Class of 1901, and is a member of the New York law firm of Milbank, Tweed, Hope, Hadley & McCloy. He is a former Assistant Secretary of the Treasury, and has held numerous other public appointments.

CHAUNCEY BELKNAP is an alumni trustee of the University and former chairman of the Graduate Council. He is a member of the New York law firm of Curtis & Belknap, and a trustee of other educational institutions in addition to Princeton. He graduated from Princeton in 1912 and has been known for many years as one of the most devoted of the University's alumni.

In connection with the illustrations used in Mr. Egbert's chapter, the author wishes to express his appreciation to the Student Photo Service, Orren Jack Turner, Elizabeth G. C. Menzies, Clearose Studio, Cushing Gellatly, and James S. Cawley for permission to use their photographs, and to the *Architectural Record* for permission to reproduce the illustration of the proposed carrel in the Firestone Library. He is likewise grateful for helpful suggestions from S. Butler Murray, John Coolidge, George H. Forsyth Jr., V. W. Egbert, and Jacob N. Beam.

Contents

THIS PRINCETON
CHARLES G. OSGOOD
page 1

LIFE ON THE CAMPUS
CHRISTIAN GAUSS
page 12

A COMMUNITY OF SCHOLARS
HUGH STOTT TAYLOR
page 36

TEACHERS AND TEACHING
ROBERT K. ROOT
page 68

THE ARCHITECTURE AND THE SETTING
DONALD DREW EGBERT
page 86

THE TRUSTEES
WALTER E. HOPE
page 122

THE ALUMNI
CHAUNCEY BELKNAP
page 136

The Modern Princeton

This Princeton

BY CHARLES G OSGOOD

THE busy day is over at last, and the exhausting hubbub of the big town is left behind. With a sense of relief the train glides from the tunnel into the late afternoon and makes for the sunset. The crowded houses and factories gradually thin out and give reluctant way to farms and woods. Within an hour there, on the left, stands Plainsboro steeple, sharp and sober and tranquil against the evening sky. And then far off, on the right, rises clear of the plain the coronet of tower and town which even at that distance puts forth a kind of benediction and peace.

The train slows down. People rise and prepare to alight. Along the platform they straighten up with a deep intake of the fresh, soft air, and hasten into the branch train. A strange sense of kinship and mutual understanding, mostly unconscious, spreads among them, a gentle tension drawing all towards one common retreat and refuge. They are coming to Princeton.

And what is Princeton?

Well, it is an ancient village lying on a long low hill, with a main thoroughfare running along the spine. A university and a theological seminary, with appurtenances, stretch themselves comfortably over its gentle south slope, and over the north side, curiously disposed by chance and time, gather the shops and abiding places of its 7,000 or 8,000 people.

But Princeton is no mere quaint and casual college town. Any wise man's son will tell you that from first setting foot in its streets. He is quickly aware of something more. I recall being strangely possessed by this "something" one radiant spring morning forty years ago, when for the first time I came to Princeton from New Haven as a candidate for one of the new preceptorships—something unseen, mellow, friendly, comfort-

able, homelike, yet stimulating and tonic I have tried ever since—and hundreds of others have been lured on to the same vain quest—to capture and explain this strange “something,” but none of us has succeeded, or ever will, so subtle, so distinct, so pervasive is this thing, and so peculiar to Princeton It has teased poets into song from Freneau to Bishop Of what avail, then, this added testimony, except for the weight it gains as the word of one bred in another grove of Academe?

Of course, nearly every college has its “atmosphere” and genius of the place, and sometimes its charm No two places are the same But the charm of Princeton, at once obvious and elusive, is perhaps the most immediate, infectious, and possessive of any

It is a compound of many simples Some of these are quite external and physical You may find them in the climate (except in July and August), in the milder and sweeter air as you approach from the east or north, in the gentle eminence crowned with towers, the ancient trees, the many old hidden gardens, large and small, the venerable mansions saturated with the joys and sorrows, the courage and endurance of many generations, in the maze of courts and vistas and shaded walks settling down snug and quiet among the gray towers, in the happy sad unison of men's voices singing at the steps in the warm spring dusk, even in the smiling cheerfulness of domestic commerce along Nassau Street on a sunny Saturday morning

You could not do better than approach Princeton for the first time, not by railroad, but from the west, coming up out of the rich and hilly countryside that stretches away to the Delaware and beyond into Bucks County After threading those clean little valleys, and dancing in heart with the little hills, and lingering by ancient stone bridges, and in imagination settling for life in one after another rich old stone farmhouse, a haunt of ancient peace sheltered in the hollow of a northerly hill, you find yourself at last on top of Princeton hill, as it were the very epitome and summary of all that warm and mellow tranquility

In such externals no doubt one first feels the charm of Princeton. But after all they are only its idiom and means of communication, speaking rather of things invisible—of what Dr Patton called 'the hidden philosophy of Princeton's life'—in a voice clear, deep, audible, yet in terms oblique, allusive, mystic.

Nothing is more impressive to one who has partaken of the life of Princeton for a generation than the imperishable persistence of her quality. Through wars, through quarrels, through poverty, through introgression of people from all nations and corners of the earth, through centripetal attraction of a dozen other institutions to its auspices—perhaps reinforced by all these—Princeton continues to cast her strange bewitching spell undiminished upon us all, native or alien.

If one is tempted to think it lies in the patina or weathering of two hundred years, he is confronted by such early witnesses as Freneau and David Brainerd. Yet time no doubt has had its hand in the matter, and the traditions of the place take their part in weaving the spell.

Of old a cleavage—at times a gulf—divided town from gown. Praise be, it is now almost closed up and traceable only by narrow and silly observers. But the name "Princeton" as we are now thinking of it includes town and college inseparably. For when the college came to Princeton two hundred years ago, it found here an established community of Scots, Huguenots, and Quakers, as substantial a foundation as any community could have, and, down to their descendants now living in each generation the spirit and vigor of their kind has entered into the quality of Princeton as it is, and enlivened her charm. With these mingled the exceptional minds attracted hither by the college. Hence the rare union of a large college with a small but substantial village, yielding in time a rich by-product of anecdote and "characters." So that a wit was once moved to describe Princeton as a cross between Oxford and Cranford.

But, one may add, with an unmistakable if faint flavor of Barchester

No element in Princeton's quality is more determinant than the tradition of service to the nation. From Witherspoon and Madison to Wilson and Forrestal this devotion has been constant and characteristic. It expresses itself not only in the strong and constant pursuit of political studies here but in the glorious company of those who have incarnated the theory of politics, and dedicated their careers and their very lives to the nation's service.

And mingled with their memory is the oft-told tale of a great and romantic battle for independence, not great in numbers but in significance as marking a turning point in the birth of the nation, and one of the high triumphs of the genius of Washington. It lives on in its scarred symbol, Nassau Hall, a monument glorified beyond all architectural glory by its baptism of fire, and enshrining the names of the hundreds of Princeton men who in all our wars have given their lives for the country.

Hard by is "Morven" which stood more than a generation waiting for the college to come, and which has sheltered signers of the Declaration of Independence and entertained many of the Presidents—a symbol in turn not only of Princeton's concern in public affairs, but of her perennial hospitality and proverbial good cheer to all comers. And this hospitality is indeed an indispensable element in the composite charm of Princeton. It has, to be sure, been misconstrued by the invidious, who seem to conceive Princeton as wholly occupied with a hebdomadal round of week ends and cleaning up. Years ago, in the easier 'nineties, they called Princeton an academic country club. But this sociability, so indigenous, so spontaneous and native, has proved to be one of Princeton's most productive cultural agents. It has been constantly effective in releasing specialists from the cramp and warp of their specialties. It has corrected the refraction of narrow academic vision. Above all it has tended and still tends, to humanize and broaden the teaching in Princeton,

to spread what Dr Johnson called and Woodrow Wilson always urged—the strong contagion of the gown

This element in the charm of Princeton marked the place above all others as the auspicious scene for the revived comradeship of learning the free and intimate family intercourse throughout the college between old and young expert and aspirant for which the preceptorial teaching and the residential college were designed Whatever the history of these matters the social solvent is at present as active and available as ever

Princeton's sociability has also been misread in less fortunate places as a symptom of relaxed standards and indolence It is odd that the error should persist among scholars whose first concern is supposedly the facts and who without overlook the almost proverbial distinction of Princeton graduates in the professional schools I recall two recruits to the faculty from other institutions of highest rating some years ago who came warned by their sponsors against the idle ways of Princeton but who severally confessed before their first year was over that they had never worked so hard in all their lives This combination of sociability and learning is no paradox or compromise Princeton as a community lives in the consciousness that without cheerful and friendly fellowship of enlightened men and women the productive energies of scholarship especially humanistic scholarship suffer from impaired circulation and tend to insignificance

Of course snobbery and false social standards like moths and poison ivy are ubiquitous and against them Princeton is not proof But the happy marriage of sociability and scholarship so favored by the auspices of the place and so confirmed by long tradition is deeply inimical to such nonsense, and has so *proved itself in a thousand instances*

The genius of Princeton is ancient and persistent and composite a curious blend of what might in a less liberal climate be antinomies The most substantial element in it though not the most conspicuous is its religious tradition This element too

is in a manner compound From New England, through Elizabeth and Newark, came Puritan Congregationalism, its native sternness, but not its convictions, somewhat relaxed by the so called "enthusiasm" in certain quarters Here in New Jersey it became fortified and stabilized by the Presbyterianism of Scotch settlers, and by the social need of organization And though the College of New Jersey rose under liberal auspices, and the Founders were moved by an "earnest Desire that those of every religious Denomination may have free and equal Liberty and Advantages of Education in the said College, any different *Sentiments in Religion notwithstanding*"—certainly a distinguished opinion in 1748—yet the spirit of logical consistency and moral conviction inherent in Calvinism, if not all its actual theological tenets, has prevailed, and is still operative in the place

Winsome and friendly and warm as is Princeton to the casual view, there lies beneath the soft and sunlit turf a granite heart of reasoned conviction in matters spiritual which is the deepest secret of her enduring life and charm The succession of Ten-
 nent, Edwards, Finley, Witherspoon Maclean, McCosh, Patton, Wilson, Hibben is significant It is a succession of great teachers of English, and of Scottish breed, who felt it their paramount responsibility to make up their minds on transcendent matters as the basis of any sound teaching And if their presence still lingers about the place, it lies in some covert but urgent propulsion upon each member of this academic household to recognize in turn his own individual spiritual responsibility of making up his mind—not after a prescribed pattern, but by honest reckoning with life Nor is this inimical to the openness of mind indispensable to scholarship, as indeed, to success in any worthy undertaking It is inimical to a common state of mind too flabby and fluctuate to assume or retain the form and pressure of any enduring thought at all

Near the center of Princeton stands a spacious and dignified white frame dwelling house in the form of a Doric temple.

THIS PRINCETON

Without knowing the facts people have sometimes remarked a certain teasing paradox about it. It seems in tune with Princeton, and yet it doesn't. There is something exceptional, unacclimated about its bearing. Its broad and generous lines express the domestic cheer which tempers the very life of Princeton, yet there is a suggestion of calculated and calculating reserve, of careful dignity and economy and thrift, that makes visitors at their first glimpse of it sometimes exclaim "Why that's New England—every bit!" And right they are, for the house was built in Northampton, Massachusetts, stood on a tract anciently purchased from the Indians, sheltered for a generation the purchaser's descendants, then embarked on a scow in the river at the foot of the tract, and made for Princeton by way of the Connecticut, the Sound, and the canal, and for eighty years has, like many another stranger, found itself at home here as nowhere else in the world.

A little apart stands another more ancient dwelling, more expansive, less self-contained, with an air of generous good living and leisurely manners and all the external amenities of breeding. It crowns a gentle rise of ground and looks back toward the South where it was first reared and whence it came. For it once stood in Alexandria, and there having fallen on evil days, brought itself out of neglect to a congenial and dignified refuge in Princeton.

These two old houses, in their two hundred mile gravitation to this common ground, from opposite poles and divergent climates and traditions, symbolize in a fashion another hidden component in Princeton's charm. For Princeton is a happy fusion of the best that the South and the North have given to our American civilization. From the South manners and warm hearted hospitality, a code of honor even in examinations, the arts of comfortable domesticity. From the North the virtues of a tougher struggle—energy and enterprise of mind and thought and conviction.

Since the days of Witherspoon, largely by way of his can-

vassing journeys through the South, Princeton has been, except for the interruption of the Civil War, a preferred college for southern men. Southern families have, from time to time, like the old house, been drawn hither and have imparted their mellow quality. South has intermarried with North. Southern and northern young men and less conventional men of the West, have met here in goodly proportion. Within the memory of our time a little group of battle-scarred, gray veterans of the Confederacy came back to Nassau Hall to receive their degrees forty odd years after they had left college in mid course to fight for their cause.

From the strenuous advanced training of the northern universities, especially those of New England or from the bleaker institutions of Germany, the faculty has been largely recruited by men who have found the severe discipline of their scholarship not relaxed but humanized by the comradeship so characteristic of Princeton. Such blend of complementary elements, each necessary to the fulfilment of the other has wrought with deep and constant effect in generating the life of "this puissant place."

I shall not forget a particular February morning forty years ago, when the roofs and gables lifted dazzling masses of new-fallen snow high into the blue—not the hard blue of winter, but the halcyon blue of February, tender with the first premonition of oncoming spring. As I was walking past the library—my gaze aloft, as where else on such a morning?—I failed to see someone coming the other way. We almost collided. Then our eyes met, he smiled, and we were both suddenly aware that the same spell was upon us, for he said, for both of us at once 'It is an adorable place, is it not?' It was Woodrow Wilson.

No man was ever more mindful of the inexhaustible sustenance for mind and spirit available in the mysterious influence of Princeton. He often asserted it in public and private, and as often despaired of defining it. Said he "I have marked how men who never saw the place before feel the spirit of it when

they walk those streets and cross that campus, how they say 'there is something in this place which we never felt anywhere' else, some atmosphere which takes the imagination, which kindles the enthusiasm, so that one can hardly leave it without feeling that he has been adopted into the Princeton family and has partaken of the Princeton allegiance''* Its external loveliness, he observed, springs from realities unseen, from "its love of men and of affairs, its preference for practical religion, in which initiative rests with its own volunteers, its patriotic feeling for the country as a whole, its predilection for the sort of learning which gives men horizon in their thinking, and schools their wits and spirits for the tasks and changes of life. It lives and grows by comradeship and community of thought that constitutes its charm, binds the spirits of its sons to it with a devotion at once ideal and touched with passion, takes hold of the imagination even of the casual visitor, if he have the good fortune to see a little way beneath the surface, dominates its growth and progress, determines its future. The most careless and thoughtless undergraduate breathes and is governed by it. It is the genius of the place' †

Anyone rash enough to engage himself with this subject is haunted by imps of misgiving. Perhaps they are retributive punishment for profanation of the mysteries. One imp instills a fear of becoming ecstatic or even delirious; others of becoming too simple, or too complex, or too analytical, or partial or out of proportion. And there is a graver misgiving that the whole matter is illusory and retrospective, that however actual and real the spell of Princeton may have been, it throve on the past, and is now itself a part of the past, glorified in the deepening illusion of wistful memory. To be sure, Wilson said that it determines Princeton's future, but that was

* 'Princeton Ideals,' *Princeton Alumni Weekly* December 13 1902 p 199.

† J. R. Williams, *The Handbook of Princeton* with Introduction by Woodrow Wilson p xvi

forty years ago, and meanwhile two catastrophic wars have swept over the world, with profound changes in American thought and life. No institution can escape them, least of all Princeton, always so sensitive to the more intrinsic motives of the nation. Was Wilson wrong? Can the old compelling charm survive these interruptions and intrusions, these demolitions and reconstructions which the times impose?

Little Jeremiahs are about lamenting that Princeton has changed, that the Princeton with whom all men fell in love is gone. Another is at hand—materialistic, "progressive," utilitarian, prosaic, unbelieving, unlovely—a modern Princeton.

Let us not be disturbed. Seasoned Princetonians who returned out of the service fearful of what they might find are now wiser. One of them* felt, beneath the marching, marching uniformed hosts, beneath the hush hush projects in the laboratories, beneath the mass teaching of crowds from Army and Navy—felt still the magic of "this other Eden, demi Paradise," still "its timelessness and peace." It was not Princeton that had changed, though she has other children now. And he foresees a new Princeton generation more mature, resolute, disciplined, less tolerant of selfish mediocrity, yet more than ever responsive to the old—nay perennial—enchantment.

The chapters which compose this book are historical, descriptive, and, by implication, prophetic; they illustrate the varied flowering and fruitage of that illusive "something" in quest of which we set out. Of its reality there can be no doubt. More potent, more fertile than ever, sustained and reinforced by generations of men and families who have drawn from it their spiritual nourishment, and in turn served it with adoration, it is and will be the informing determinant in the varied manifestations of Princeton life described in this book—her learning, her teaching, her setting, her daily round, her administration, her men in the world.

* Lt. Com. James O Malley, Jr., *Princeton Alumni Weekly* July 20 1945 pp. 7 B.

THIS PRINCETON

Rare and delicate and elusive as it is, its real greatness lies in its undiminishing power to effect a continuity of kind in Princeton, a definite and living connotation of her very name.

*Now, then, and still our nurturer,
Our Lady of the Courts and Spires,
Crowned with the seven mystic fires,
The Three and Four which scholars hold
Of purer worth than sea-born gold. . . .
For she—her ways are not as ours,
She sits above the tide of hours,
Life, death may take her sons, but she
Sits throned in that eternity
Where Love and Truth and Beauty are
Of lordlier brilliance than a star.**

* John Peale Bishop, "Who shall not know next April."

Life on the Campus

BY CHRISTIAN GAUSS

IF I were asked to indicate briefly the character of our campus life, I would begin by emphasizing that Princeton is a residential college in the country. Its founders, religiously minded men, living in the century of Pope, were predisposed to believe that the devil made the town and that the country stood more directly under the aegis of the deity. They believed as our motto still reminds us, that their country college would thrive under the wardenship of God. *Dei sub numine viget*. This residential feature is more than a pleasant concomitant of the life of Princeton undergraduates. It constitutes an integral part of her system of education and still determines, more than any other single factor, the spirit and character of her campus life.

I cannot pretend to give an objective account of this phase of Princeton's life. I am a prejudiced witness. I shall therefore indicate the nature of my prejudice and then recount how the life of this strongly residential college first impressed an observer who, academically speaking, was not to the manner born.

The first reason for my prejudice is rooted in a neglected aspect of America's educational history. Contemporary critics frequently imply that it is only recently that we have seriously considered the question: What is the proper function of the liberal arts college and what means should it employ to discharge that function? This is misleading. Those of us who entered university teaching in the late years of the nineteenth century were deeply concerned with these problems.

Our older American colleges were based on the English model and had accepted the residential principle. In one important respect, these old-fashioned colleges accepted an idea later presented with different emphasis by John Dewey—namely that

the school, the college, was itself a society in which the student was to practice and thus to learn the art of living the good life with his fellows and his elders. The criticism often heard that their students were over privileged aristocrats is far from the whole truth since so large a proportion of them were preparing themselves for later service in the Christian ministry which, in our pioneer days, was neither a snobbishly motivated nor a lily white profession. If the older American college was based upon a unitary conception of college life, the curriculum was based upon a unitary conception of all knowledge. It assumed that the various fields of knowledge constituted a fundamental unity and any sound intellectual training must be based upon a recognition and understanding of their interrelation.

During the nineteenth century much had happened to weaken and break down this unitary conception of the liberal arts college. The poverty and puritanism of the colleges were factors. Living conditions were dismal and often unsanitary. Revolts, particularly "food riots" by undergraduates, were so frequent that by 1850 virtually all our older colonial colleges were forced to give up even the pretense of maintaining a "Commons," or community dining hall. By this date another disintegrating factor was operating. This was the steadily increasing and deserved prestige of the German universities. They were not residential colleges and were concerned not with preparing men for life, but in providing training in highly specialized fields of scholarship. Their admirable ideal of *Lehrfreiheit* and *Lernfreiheit* could, in my opinion, be realized only where students were further advanced in the arts of living and learning than our American high school graduates. When the oldest American college, Harvard, accepted for its undergraduates the free elective system, it had gone a long way toward substituting the German university ideal for that of the older American college.

By the time the preceptorial system was inaugurated in 1905, opinion on the function and purpose of the liberal arts college was therefore already sharply divided. To me as to many of the

young teachers of that time there were three outstanding figures in this debate. President Eliot of Harvard held that the unsatisfactory situation in American education indicated that we had outgrown the older collegiate ideal. The two other figures were both at Princeton: Woodrow Wilson and Andrew Fleming West. If Princeton in the long run suffered relatively little from the later bitter personal antagonism between her two great sons, it is because there was no disagreement between them on fundamental principles of education. Both accepted the ideal of the older residential college and believed that college teaching and college life could and should be reconstituted to achieve it. Wilson's attitude is too well known to need restatement. West not only accepted but championed Wilson's preceptorial method as an effective means of "coordinating the student's knowledge and of deepening his interest in the central concern of the college." Both believed in an organically conceived curriculum. West was so strongly in favor of the residential ideal that he introduced it into his plans for the Graduate College.

One reason, then, for my prejudice can be found in the fact that from the first I was strongly impressed by Princeton's stand in this controversy on the function of the college. There is another reason as well. I was myself to become involved in the life on the campus and as I look back through the lengthening vista of the years I am bound to see events through that haze of distance which, the proverb warns us, will lend enchantment.

In Princeton the sense of class unity has always been strong. Every class at least pretends it is the best class ever. In the attempt to find some unique distinction for 1894, M'Cready Sykes used to make the boast that no class anywhere ever resisted education more successfully than he and his classmates. Though I did not know the Princeton campus of the 'nineties, I have come to know well many of the graduates of '94, including M'Cready Sykes. My long acquaintance with these men makes me doubt the validity of this claim. At the time of his

graduation Mr. Sykes was already an accomplished humorist, public speaker and master of the English language and was soon to become a distinguished member of the bar. If it is true that by their fruits ye shall know them, he and his classmates, in spite of his boast, cannot possibly have succeeded in making themselves entirely immune to the educational influences of the college. The results prove that somehow or other, if only by some mysterious osmosis, he and his contemporaries must have absorbed the elements of a sound education.

It is true, however, that at Princeton, as at other older colleges, the curriculum and the method of teaching in the late nineteenth century no longer aroused the enthusiastic cooperation of the undergraduates, and many graduates of the golden 'nineties must have spread abroad the impression that at Princeton the undergraduates no longer "cracked a book."

College presidents and deans may have excellent theories and *in practice* run very poor colleges. In spite of my initial prejudice in favor of the educational theories of Wilson and West, it is fair to add that there were other factors which were to make me, if not a dispassionate, at least an interested and somewhat apprehensive observer of the Princeton scene.

Someone has said that in America there are three sexes: men, women and professors. If this be true, I cannot deny that I belonged to this third sex at the time I first became acquainted with the Princeton campus. I had already undergone considerable academic conditioning. I was fairly familiar with a number of American universities and had taught for six years in two of them. One of my closest friends was a distinguished scientist. He had urged me strongly not to accept the call to Princeton, and argued that as a middle western graduate of a state university, accustomed to dealing with serious minded students, I would never feel I belonged in Princeton, a rich man's college. Her undergraduates were play-boys and their campus a country club. The preceptorial system which might succeed elsewhere could not succeed there since the students

would not take it seriously. If I accepted, I would regret it within three months. Although I did not accept my friend's indictment of the Princeton undergraduates at face value, as the opening of college approached in the fall, I began to wonder whether there was any foundation for it at all and just what this species was like.

The opening of college fell on a glorious September day. The sun was flooding down into the open spaces of lawn and through the interstices between the quiet, lofty elms bordering the walks. Victorian that I was, I could not help being reminded of Tennyson's phrase, the "haunt of ancient peace." We were still in the heyday of the "college customs" era which had taken so strong a hold in our older eastern colleges and was nowhere more pronounced than at Princeton. The freshmen were in their "uniforms" — black shoes, black socks, black jerseys, black ties and black dinks. But their somberness was external only. They gathered into busy knots, introducing themselves to each other and bubbling over inwardly with life. The sophomores were birds of much gaudier feather, and self-consciously flaunted the college colors on striped blazers of orange and black. Juniors and seniors were "statelier" and moved with easier assurance. On this belated summer day many of them were in white flannels. With happy faces, they moved along the campus walks through the dappling shadows of the overarching elms, but their progress could not be rapid, it was arrested after every few steps by classmates who stretched out hands in friendly greeting. I could not help picking up snatches of their talk. All of them knew each other by their first names or nicknames. It was Jim and George or Pudge or Shm. Have you had a pleasant summer? Where are you rooming this year? Come over and see me tonight. I'm in Brown, or '79, or Witherspoon. The dominant note everywhere was one of friendliness, companionship, and what struck me most forcibly was that here everyone from the lowliest freshman to the gravest senior was so thoroughly imbued with the satisfying sense of belonging to his

class and to this community Up to that time I had never seen a campus where the sense of this relationship seemed to be so strong and so pervasive, and I have not seen one since I am sure now that this first impression was warranted and that the most important single aspect of life on the Princeton campus is this unusually strong sense of belonging to a community

In one of Dostoevsky's novels one of his characters exclaims with the sense of having discovered a significant spiritual truth, 'We were all born on purpose to be together' The Princeton undergraduate comes to feel that he is born on purpose to be together with his classmates, and when a Princeton alumnus tells you that he is a member of the class of 1900 or 1926 or 1938, he does not mean to indicate merely the date of his graduation In most cases it means that outside of his immediate family he has a stronger sense of kinship with that class than with any other body of men

I realize that the alumni of nearly all American universities have a sense of loyalty to their particular alma mater and there are enthusiastic and devoted graduates of all our colleges I hesitate to make of this fairly common trait the particular characteristic of Princeton life, since in all colleges it is of course a matter of degree and varies with the individual and with the college It would be idle to assert that all Princeton undergraduates are exactly alike in any respect They are not In a long term in the dean's office I have seen a considerable number of unhappy young men of the lone wolf type There are some, too many indeed, in every college In spite of this, I still believe that the sense of interest in the class and campus community is stronger at Princeton than in any other college I have known It is this that made it possible to develop and maintain at Princeton, even through the confusion of the war years, in the diminished body of normal civilian undergraduates, the honor system in examinations I have seen it introduced and fail in several colleges and I have become convinced that it is possible successfully to turn over such functions to undergraduates only where

as for instance at the University of Virginia and at Princeton, the undergraduate is imbued with a particularly strong sense of responsibility to and for the community of which he is a part

Lest I run too far ahead of my story, let me return for a moment to my first experience on the campus, as a newly arrived preceptor The charm of the site, the beautiful September day, the cordiality of the greetings of these young men to each other, impressed me favorably It gave me an exhilarating sense that my life had fallen in pleasant places But I couldn't help feeling a lingering sense of apprehension The opening of college, after all, was everywhere a joyous occasion What would work be like in this seductive atmosphere? As a place where young men were to pursue learning, was there any truth in my mentor's implication that this was only a kind of toy town, a play world? Would this alluring friendliness prove to be only the first strain in the song the sirens sang?

I had not long to wait My most important class met the following morning and my first preceptorials a few days later Clearly these men did not resent the intrusion of the preceptors into their reputed world of *dolce far niente* There were good natured quips We were "those preceptor guys"—"Fifty stiffs to make us wise" But on the whole I was to find within a few weeks that the attitude of the Princeton undergraduate was in fact the opposite of that against which my old friend had warned me

There is of course no formula, no panacea which will solve the problems of all our varied institutions of higher learning What concerns us here is the conviction, shared by virtually all of the preceptors, that nowhere in America could this experiment have been tried with a better chance of success than at Princeton Her residential tradition and resultant sense of community interest were sufficiently strong to include not only the undergraduates but their teachers Making allowance for the fact that we were slightly older than our students, it is still

true that the welcome they extended to each other they extended to us

In some respects my old friend was quite right. He reminded me that I was a middle westerner. Life in those years was less stratified socially in the middle west. We had no "first families" and we met each other on a friendlier and easier footing than *men do in the older communities of the east*. My middle western alma mater, like the other state universities I had known, took little interest in the living conditions of undergraduates. She has since played a leading role in this respect and by building dormitories and a university union, has done much to unify the life of the campus. But in 1905, as a young preceptor, when I compared the conditions of my own life as an undergraduate with those which I found in this residential college in the country, I confess that I felt the Princeton system had many advantages.

At Princeton, the new preceptors were made to feel very soon, to a degree I for one had never experienced before, that we were all members of a common household of living and learning which included both undergraduates and faculty. We were strangers and they took us in, as immediately and as cordially as could any town of my own middle west whose boast it was that it knew no caste system and was no respecter of persons. I can give only one example here. In non residential and indeed in residential colleges of 1900, faculty and students constituted two distinct orders. In my own undergraduate years, for instance, it had never occurred to me to ask one of my teachers to take a meal with me, nor as an undergraduate had I ever been invited to take one with any of my teachers. At Princeton, there was by 1905 an interpenetration of the worlds of undergraduates and faculty. It was normal procedure for upperclass students to ask a preceptor or professor to come to dinner with them to continue a discussion, to talk over university problems or merely to spend a social hour together. To me this procedure was so new and unusual that I was taken aback.

by my first invitation. It came to me from two of the editors of the *Nassau Lit*. They wanted to discuss some problem in connection with the magazine. Both of them were members of my class and as they were top flight students, there could be no question of apple polishing or trying to get a drag. Nor did this group of students have any hesitation about dropping in at a preceptor's home to borrow a book or discuss some problem which had arisen in their work.

Another instance which I recall allayed any latent fears which I may have had that there was any academic shennanigan involved. My visitor was again one of my ablest students. He found me typing a manuscript on an old second hand Hammond by the two finger system. He noticed that the keys occasionally stuck and probably that I occasionally swore under my breath. My visitor examined the typewriter for a moment then told me the whole thing needed to be taken apart and cleaned. I explained that it had only come back from a repair shop. "I'm afraid they did a poor job and if you don't mind I think I can fix it for you." Without waiting for permission, and in deed against my protests, he took off his coat, asked for some gasoline, a rag, and machine oil and in half an hour completely dismantled my typewriter, cleaned it, oiled and adjusted it, until it worked smoothly again. The friendship which began over my broken down Hammond has grown through forty years.

It may be that the teacher of literature is particularly privileged, for where a strong sense of community interest reduces the class consciousness of faculty members and their undergraduates, I can think of no sounder basis for friendship than a common interest in great books and the cultural achievements of mankind. In connection with the special privileges which the teacher of literature probably enjoys I have already mentioned that my first invitation came from two editors of the *Nassau Lit*. Young men who write are likely to be enrolled in literary courses and preceptorial discussion easily opens the door

to friendly acquaintance. As Princeton's publications in the modern period were so numerous and underwent such varying fortunes that no detailed account of them is possible, I may be pardoned if I continue for a moment to count my blessings. My friendly relation with succeeding editors of the *Lit* were to continue. I cannot mention them all, but what this meant as a privilege will be evident when I add that in a single year, 1916, I was allowed to work with young men as gifted, and later as distinguished, as John Peale Bishop, F. Scott Fitzgerald and Edmund Wilson.

In 1915, at the request of the Graduate Council and the Press Club (the undergraduate newspaper correspondents), I became their faculty adviser, and this brought me into closer touch with the editors of the *Princetonian* as well. Campus rebels are most likely to be found on editorial boards and it is a sign of health that we had our full share of them. It is the young men who write who, in general, are most likely to present new and unconventional ideas. Articles appeared which shocked some of my colleagues, and at long intervals, editorials based on rumor or inadequate information attacked the "administration" for quite imaginary shortcomings. It is a particular satisfaction to recall that my friendly association with undergraduate writers and editors was not altered when I became the disciplinary officer of the college. If on the whole we suffered little from undergraduate editorial bitterness and vehemence, I believe it was because the university was wise in never imposing censorship and that the chartering of publications was, in 1927, placed in the hands of a joint faculty student committee whose purpose will be described later.

Far from feeling as my mentor had warned, that I would not "belong" at Princeton, one of the most gratifying and significant aspects of our campus life was that the conventional relationship of professor and pupil tended to disappear and was replaced by the growing sense that we were fellow students together.

This is the student teacher relationship which to my mind should exist in what are for most young men and women the final years of "higher education" Anyone who considers the outstanding record which young Princeton graduates have consistently made through the years in professional and graduate schools, where they are in competition with graduates of all other colleges, should attribute it largely to the fact that the residential tradition and the system of study which developed after the preceptorial method was introduced have more completely weaned them from their dependence upon teachers When they arrive in professional or graduate schools, they realize that the professor is not there to teach them something, but only to help them learn

Soon after my arrival I was to find exhilarating evidences of another aspect of this sense of community interest at Princeton Certain events were marked off on all our calendars as red letter days They were the communal festivals of our small collegiate city state and elicited the interest and participation of both undergraduates and faculty The older colonial colleges had not encouraged extra-curricular activities There was, however, one exception debating All the older colleges possessed literary or debating societies Princeton had two of them, The American Whig and the Closophic Societies, founded in prerevolutionary days Most of the younger members of the faculty were invited to belong to one or the other and underwent a formal initiation The rivalry between the two "Halls" was still intense and they occupied the rather imposing marble columned buildings facing the Cannon Their wide steps were a rendezvous for groups of hazers and here the freshmen must have their class picture taken before the ever alert sophomores rendered them unrecognizable with flour poured and watered down from above or tossed in from the sides The heavy doors behind these ample porticoes had combination locks like safes and only members knew the combinations This atmosphere of secrecy and conspiracy dated from the eighteenth century and was already

on the wane in 1905. But behind these doors training in debate was carried on earnestly and successfully. Faculty members were called in to assist in preparing the teams which were to represent Princeton in the annual triangular debates with Harvard and Yale. It was and remains an excellent training school in public speaking. It was in these debates that Walter E. Hope '01, a trustee of the University, did his first public speaking; and here Norman Thomas '05 first learned to address obstreperous audiences. The triangular debate with Yale and Harvard was still an important manifestation of communal activity. Each university prepared two teams, one to present the affirmative side of the question, the other the negative. In any given year one Princeton team presented the affirmative at Princeton, let us say against Yale. The other would present the negative against Harvard at Cambridge. To win both debates created a sense of triumph now reserved only for football championships. Alexander Hall could seat nearly all our undergraduates and faculty of those days and every seat would be filled. This was before the days of long-distance telephone or radio. If Princeton won in Alexander Hall, very few of the audience left. They waited, often until after midnight, for the telegram which would announce the result of the debate at Cambridge. A glee club quartet might be called in to ease the tension of waiting. If the telegram announced a dual victory, cheers like those celebrating a winning touchdown broke from the crowd and the undergraduates started their midnight P-rade. Undergraduates still conduct intercollegiate debating and train for it in the now merged Whig-Clio Halls. If there is little change in the interest and competence of the debating teams, audience interest has, however, almost disappeared at Princeton as elsewhere. Perhaps the radio commentators and round tables give us too much of it. What is pertinent here is the far higher degree of interest which debating aroused then in a residential college, where the sense of common cause and communal interest was so strong. It was to be true of other events of that time and of events which in

the last forty years have succeeded and sometimes supplanted them. The large annual dinners given by the *Daily Princetonian* and the *Nassau Lit* in the old Princeton Inn could not of course include all members of the community, but they, too, had this representative character and in inviting their guests the *Prince* and *Lit* seemed naturally to observe this principle of proportional representation of faculty and students at events and occasions of importance to the college.

It was the characteristic feature, we are told of the Roman Saturnalia that on such holidays even the slave could speak he could tell his master what he thought of him. What interests us here is that our academic city state also had its Saturnalia provided by the annual performances of the *Princeton Triangle Club*. In the days of beloved Booth Tarkington '93 who had been one of its founders, it was informal and spontaneous and a group of undergraduates with a talent for parody and music got together to present an amusing piece more in the spirit of high jinks than of high comedy. The group which started it had such unusual gifts for providing entertainment that their performances staged with the exuberant gusto of youth immediately attracted nation wide attention. This soon made it possible for them to stage tours during the Christmas holidays and give performances in our larger cities with sizable box office returns. This outside success and financial prosperity were not unmixed blessings. George Moore once said that a theater to remain conscious of its artistic mission should have lost a little money at the end of the year if possible. The Triangle Club never enjoyed the advantage of suffering from lack of funds until some years after the 1929 depression. The delight experienced by its earliest audiences sprang in large part from the originality and spontaneity of its performances. It was almost inevitable that informality should give way to organization. Staging and costuming became more elaborate and though it has never lost some of its original idea as time went on the Triangle Club tended to imitate what it had begun by satirizing

the musical comedies of the Great White Way. In 1905 it was still in its heyday and its performance of that year, *Tabasco Land*, is still remembered as one of the most delightful musical comedies staged by undergraduates. As was to be expected in our community, they presented two performances, one for the faculty and one for undergraduates. It gave undergraduates an opportunity to get off their chests, and present in amusing fashion, any grievances they might feel against individual professors or the administration. This is not the place to evaluate the Triangle's performances as works of art, but these performances did provide one more of those communal occasions which brought faculty and undergraduates together. If in some later years the performances became over elaborated Roman holidays, the fact that the staging and directing of the shows remained in the hands of the undergraduates made it a valuable and successful training for young men interested in the theater.

If the spirit of youth and high jinks was largely responsible for the development and success of the Triangle Club, it did not entirely satisfy the community's need for legitimate drama. This need was felt by many of the participants in the Triangle show itself. Before World War I the English Dramatic Association intermittently presented Elizabethan plays, including a remarkable performance of Marlowe's *Dr Faustus*. More important to the campus however, was the organization, first in the lumber room of the gymnasium, of The Theater Intime, a little theater which could seat, on undertaker's chairs, an audience of less than a hundred faculty and students. The generosity of an alumnus made it possible later to remodel a room in Murray Dodge, which preserved the *intime* character and gave it its name. If more comfortable, it was but little larger than the original quarters. Here, the undergraduates without any outside professional assistance, presented plays often plays written by themselves. The degree of success which they achieved would have been impossible in a larger community where frequent professional performances satisfied the need for drama.

Thrown entirely upon their own resources, the undergraduates here learned something not only of the art of acting but of directing and staging plays as well. In the Intime or the Triangle Club, Jose Ferrer, Bretagne Windust, Norris Houghton, James Stewart, Myron McCormick, Josh Logan, among many others who were later to earn distinction as actors, directors, designers, or stage managers, first exercised their talents.

It would be neither fitting nor possible here to deal with the important role which religion and religious organizations fill at Princeton. Freshmen and sophomores are still required to attend one half the Sunday services in the University Chapel and religion has now become a recognized department of instruction in the curriculum. The Chapel Congregation under the Dean of the Chapel, provides a college church, but as Princeton is non-sectarian one of the most significant developments has been the increasingly important function discharged by religious societies maintained by church foundations. Three denominations, the Episcopal, the Presbyterian and the Catholic, have maintained student chaplains to conduct their work on the campus. No discussion of the organizations that bring undergraduates and faculty together would, however, be complete without mention of the work done by The Student Faculty Association. The striking success of its Princeton Summer Camp for underprivileged boys has aroused the interest of social workers in many of our larger cities.

Advances in science and technology here as elsewhere have, in the past forty years, made some adjustments necessary in the closely knit texture of Princeton's campus life. Improved train service, the automobile and radio have brought the campus into more immediate contact with the larger world. Week-ending has become a national habit. All this could not fail in some respects to have a levelling effect and to diminish some of the earlier outward aspects of undergraduate life. Nowhere is this more striking than in the matter of dress. The average undergraduate of today usually dresses quite like his older

brother who has gone out into the "wide wide world" In those years, whatever the financial standing of parents might be, a large number of undergraduates wore brown corduroy trousers, jerseys or sweaters In the matter of dress, therefore, there was little difference on the campus between the son of wealthy parents and the boy working his way through

Today there is a greater difference, but more is being done to help the boy with meager funds Twenty years ago he was largely left to find his way alone though many alumni were even then becoming interested in his problem

The most important of these was George Galt, a graduate of the class of '92, who supported himself by private tutoring and in spite of crippling physical disabilities, gave what encouragement and advice he could to undergraduates in search of jobs In 1910 the Graduate Council addressed itself to this problem and as a result of its initiative, the trustees in 1911 authorized the setting up of a Bureau of Self Help From its modest beginnings as an off shoot of the Registrar's Office, it has become (1942) an important administrative department of the University and has done much to simplify and ease the problems of needy students Its records show that in normal years about seven hundred undergraduates or nearly one third of the total enrolled, register with the Bureau and support themselves wholly or in part The situation of this group was further improved by a considerable increase in the number and size of scholarships provided, and by a corresponding increase in loan funds made available on easy terms No single university or group of universities can solve the problems of making higher education available on equal terms to all young Americans whatever the economic status of their families Here much remains to be done, but during the past thirty years no other problem has more consistently enlisted the interest and generous cooperation of alumni, faculty and trustees than this attempt to make Princeton's type of education available to intellectually qualified students who are unable to meet its cost How grati-

fying the progress made in assisting needy students has been will be evident when we consider that in the last normal year, 1940-1941, the University distributed \$236,044 to 587 men in scholarships and loans, while earnings through the Bureau of Student Employment amounted to an additional \$140,461

* I have already indicated that at the time of their founding, all the older American colleges were planned on the principle that teachers and their students constituted a self-sustaining society who should live and move and have their being together. One of the central aspects of this community life was provided by the dining halls, often significantly called the Commons. We have seen that in the nineteenth century virtually all our larger colleges were compelled by student revolts, "food riots," or other causes, to discontinue their attempts to feed the undergraduates. Princeton, like other colleges, had its full share of difficulties on this score. When the Refectory was destroyed by fire about 1850, the authorities were probably quite content to give up this feature of residential life. Early in the twentieth century this phase of college life again became a matter of concern to the college and in 1906 the trustees decided to feed a portion of the freshmen and "to establish dining rooms and club rooms" in University Hall. In the following autumn all freshmen were expected to take their meals under University auspices. When the present new modern Dining Halls were completed in 1916 the rule was extended to include sophomores. As a result of several actions taken in the 1930's, arrangements were completed which made it possible for underclassmen, without additional expense, to invite faculty members to lunch or to dinner with them in a large and attractive room in Madison Hall. The college also took over and reorganized University Gateway Club for upperclassmen and encouraged the founding of the University Cooperative Club. These additional facilities made it possible to alter the older system of elections to upper-class clubs, which had long been unsatisfactory to the undergraduates themselves. After eating for two years in Commons

with his classmates, every sophomore was now assured of an invitation to eat with a smaller group of upperclassmen. All undergraduates were housed in campus dormitories or near-by buildings sanctioned by the University. All this meant a reaffirmation of the old residential ideal. Room rents on campus and board at the University Dining Halls were no more expensive than comparable accommodations in town. If for any reason a promising candidate for admission felt that living and eating with his classmates would involve additional expense, his case always received special consideration from the offices concerned with granting financial assistance. For that reason Princeton had practically no "day pupils," and reestablished its residential tradition in all respects. It became more and more generally recognized that learning to know and live with one's classmates was an essential element in a Princeton education.

Another important movement was the extension of political rights to the undergraduate members of the community. As in the founding of the honor system, the first steps were taken by the undergraduates themselves and the leader in the movement was Kenneth Sawyer Goodman '06. With the hierarchical arrangement of classes of that time, only seniors were supposed to wear the *toga virilis* of the campus and a Senior Council was organized in June 1905, "to represent the saner phase of undergraduate opinion and form a link between the undergraduate body and the faculty and board of trustees for the purpose of connected effort along any line where such effort seems necessary and advisable."

Though there seems to be no record of official recognition of the council by the board of trustees before World War I, there is no doubt that it was consulted by University officers and committees of the board, and proved its usefulness. In October 1917 the board officially approved changes in the constitution of this council and granted its representatives the right to sit in the faculty committee on discipline, without specifying the extent of their powers. In 1923 the undergraduates recommended

the reconstitution of the Senior Council as an Undergraduate Council on which all classes were represented. In 1927 the trustees granted it fuller powers, including the right to be consulted by the appropriate faculty and trustee committees "before final action is taken on matters of undergraduate life." They were also granted direct representation on the committee on non-athletic organizations and the committee on discipline. This was extended later to include membership on the University Council on Athletics. The effect of this extension of political power may be seen in the functioning of the committee on discipline. In order that the undergraduates might not feel they were merely yes men, the procedure provided that the undergraduate members of the committee could, when they felt they were in fundamental disagreement with their faculty colleagues, call for separate votes by the undergraduate and faculty members. In such disagreement between the two wings of the committee, the chairman was empowered to make the decision and report the disagreement. In certain quarters fears were expressed that the undergraduates would consider themselves devil's advocates and consistently argue and vote for acquittal. These fears proved groundless. In hundreds of cases considered in nearly two decades, such divisive vote was called for in only four instances. This extension of political rights gave the undergraduates the feeling that they were actively participating in a more democratically governed community.

The spirit in which athletics have been conducted at Princeton could best be illustrated by dealing with the character and activities of a representative Princeton coach like Bill Roper and a representative Princeton athlete like Hobey Baker. Yet space permits only a brief summary. Modern Princeton's athletic policy can be briefly stated in the phrase, "Athletics for all." She encourages all undergraduates to take part in some form of athletic competition, either intra mural or intercollegiate, and before the war a large percentage of the undergraduates were doing so. Princeton has taken this attitude partly because she

accepts the ideal of the Greeks, "a sound mind in a sound body" But there is another reason as well Perhaps nowhere can the lesson of cooperation be inculcated in young men more effectively than where, in free competition, they win their place on an athletic team which represents the community They learn that quality for which Horatio commends his friend Hamlet, "to take with equal thanks fortune's buffets and rewards" They learn sportsmanship, to respect their opponents and to give all they have, not in the interest of their own prestige but for the community they represent There are many types of colleges in our country Only that undergraduate will truly represent a college when he freely chooses it because of the educational opportunities which it offers When a young man highly proficient in athletics is induced to come to a particular college by material considerations offered only to athletes, he comes as a member of a separate caste who cannot be said to represent that college Indeed the presence of a specially recruited caste brought in to play football makes it impossible for the undergraduate who freely chooses his college ever to represent it on the gridiron This perverts the spirit of intercollegiate sport and many of the benefits which undergraduates should derive from intercollegiate competition are lost

A number of other colleges sought to solve this problem In 1923 Princeton entered into the so called Presidents' Agreement with its two most important rivals, Harvard and Yale, to set up conditions of athletic eligibility Its purpose was to make certain that all members of their teams and crews were representative undergraduates in good scholastic standing This agreement was revised in the 1930's Before Pearl Harbor most of the other colleges with whom Princeton competed had accepted or were developing the same code Formal extension of the agreement was delayed by the war The so called Ivy group of colleges, however, organized the necessary administrative committees, and eligibility was determined in the season of 1946,

by an extension and recodification of the principles of the H Y-P agreement

" Much the same was true of the work of the joint student faculty committee on non athletic organizations. The committee recognized that undergraduate organizations could, if properly conducted under University sanction, provide "a career for talent" where students with particular aptitudes could on their own initiative, develop them without interfering with their scholastic duties. While insisting that every organization must meet its financial obligations, the committee encouraged student initiative, and believing in free speech never imposed censorship. Its aim was to see to it that admission to a board or club was open on the same terms to all qualified members of the college and that all organizations accepted the responsibilities that went with their representative character. By 1940 virtually all student organizations that used the name of Princeton, or regarded themselves as representative were functioning under the committee's jurisdiction.

The differences between the German university's ideal and that of the American residential college have been indicated earlier. In the twentieth century the most striking weakness of the German system became evident. It failed to develop in any fair proportion of its students the desire for and competence in effective living in a cooperative commonwealth. Democracy is only another name for the type of state in which every man is a responsible member of such a commonwealth. If there is any relationship between the educational and political systems of a country, the failure of democracy in Germany can be ascribed to the failure of the German educational system to imbue any sufficient number of its citizens with this ideal.

If we may now contrast briefly Princeton's ideal with that of the German university system it might be put as follows. Princeton recognizes that its primary function is to train the mind and develop competence for scholarship and research. But it has not believed in developing scholarship and research

alone, or in developing them for their own sakes. It has made the proud boast that it aims to train "the whole man." The whole man of course includes those qualities which make up what for lack of a better word we call his personality. Personality may be defined in this sense as that ensemble of qualities which makes it possible for a man to pull his own weight in the common boat, to live cooperatively with his fellows in the common interest of all. The man who in all his attitudes and activities remains too self centered lacks personality. Much progress has been made in developing tests which measure, with some degree of effectiveness, personality as thus defined. All of them indicate that there is no correlation between qualities of personality and strictly intellectual aptitudes. The self-centered man, the lone wolf, is fully as likely to be intellectually gifted as his more socially minded fellow. Princeton believes that a campus which continually invites the student to participate in the life of his community and to measure his action in terms of the community's welfare, is an important factor in education. The art of living is perhaps the most important of all the liberal arts. Princeton realizes that no type of education will rid the student of the old Adam inherent in us all, but it also believes that the man who has developed the sense of community interest in college will carry it over into his life work and that it will help to shape his attitude toward the town, the state or nation he may be called upon to serve. There is no doubt that undergraduates have enjoyed being a part of this residential and largely self-sustaining community and that it has helped to develop their sense of companionship. Companionship, significantly enough is by derivation the relation which grows up between messmates, between men who eat their bread together. We may well ask, is not this form of campus life the one most likely to realize the ideal formulated by Woodrow Wilson, "Princeton in the nation's service" which now, if we are to constitute One World, should be extended to read "Princeton in the nation's service

for the welfare of mankind"? This is at least the hope, the dream of many Princetonians

As we began with an account of the opening of the academic year, it would seem fitting to mention briefly the ceremonies which mark its close

Commencement and reunion may be mentioned briefly since they are so well known to all alumni and visitors to Princeton. Outsiders who in peace years saw in the immense crowds of returning alumni a few overstimulated irresponsibles break tether and indulge in amusing and sometimes regrettable alcoholic exhibitionism, have missed the significant aspect of this ceremony. They have noted the bands and banners, the pageantry of the gaily uniformed older classes marching down to Osborn Field as escort to the seniors about to be inducted into alumni status. They have probably been bewildered when the hush fell on the suddenly ordered crowd after the parade and when they heard the strains of "Old Nassau" swell from the lips of thousands of uncovered graduates, and saw the raised arms wave in rhythmic unison with the consecrated song of their alma mater. Of course this is ritualism, it is the affirmation of the solidarity of the alumnus with his classmates and his college, the annual festival of initiation and rededication. As with the Greek mysteries and many religious festivals, the emotional concomitants occasionally bring in unseemly counterparts. But for the great majority of alumni it remains a ceremony fraught with deep inner meaning.

The visitor who has been conscious of what appears to be only hullabaloo and noise does not realize that in the important class reunions which follow, these classmates invite again to their class dinner, as an affirmation of their continuing community of interest, some of their faculty friends. They hear from them accounts of campus episodes which occurred in their own day and reports on how the college has maintained the common heritage.

LIFE ON THE CAMPUS

The youngest of us who came in with the preceptor guys in 1905 are now retiring. I believe I speak for all that group when I say that through four decades of service on the campus we came more and more to recognize the truth of the words in which Dean West liked to describe it: "That household of living, that household of learning, which is Princeton."

A Community of Scholars

BY HUGH STOTT TAYLOR

THE one hundred and fifty years of the College of New Jersey at Princeton provided no adequate basis for projecting the history of the University during the subsequent half century. The Princeton of 1947—its strengths and its potentialities, requires for its description new factors of growth—new terms in the equation of its development which were not present as Princeton celebrated its sesquicentennial at the close of the nineteenth century. Princeton as an educational center, as a singular expression of cultural effort in America, required not only a profound and far reaching reorganization of the college which hitherto had been the dominant factor in the life of the community, but also a parallel growth and development of other educational and research institutions, to form with it the unique community of scholars which exists today.

The founders of the College of New Jersey did, indeed, provide the setting in which such an educational experiment could mature. The transfer from Newark to Princeton in the earliest years of the college's history took education away from the developing centers of city life in the state, placed it in a rural community which the growing stream of commerce and industry left untouched and unspoiled. This factor in itself provided Princeton with a distinguishing characteristic that Harvard, Yale, Columbia, Pennsylvania and other educational enterprises of those early years could not continue to enjoy when the expansion of the communities in which they were situated ringed them round with all the adjuncts as well as the disadvantages of modern city life. Each became a single, if important, feature of a total civic activity in a commercial or industrial community. *Princeton* in contrast, became more and more definitely identified as a college town. Originally a half-way station between

COMMUNITY OF SCHOLARS

New York and Philadelphia in the old coaching days, and thus a stage along the road in the journeyings of business and commercial life, in the railroad developments of the nineteenth century it fortunately achieved its present rural status, "three miles from the main railroad line" That distance was ample for Princeton's manifest destiny It was not too great to cut it off from the broad stream of life and its problems which the development of New Jersey and its nearest neighbors created Princeton became a vantage point from which life beyond its limits could be surveyed—where, nevertheless, a community could grow whose main concern was with the mind and the spirit, the acquisition of knowledge rather than with the material things of life.

The blueprints of a university to replace Princeton College emerged in the first years of Woodrow Wilson's service as president of the University The initial emphasis was rightly on men rather than on materials Wilson realized that the evolution required a large scale infusion of new blood, of scholars who would assume an intimate personal relation with small groups of undergraduates and impart to them something of their own enthusiasm for the things of the mind The preceptorial system was born Developed at great expense and sacrifice, it became the cornerstone of undergraduate instruction at Princeton

To Wilson, the preceptorial system seemed "the only effectual means of making university instruction the helpful and efficient thing it should be" With a body of fifty preceptors which he brought to Princeton in 1905 he planned to "transform the place where there are youngsters doing tasks to a place where there are men doing thinking, men who are conversing about the things of thought, men who are eager and interested in the things of thought. Wherever you have a small class and they can be intimately associated with their chief in the study of an interesting subject they catch the infection of the subject, but where they are in big classes and simply hear a man lecture two or three times a week, they cannot catch the infection of

anything, except it may be the voice and enthusiasm of the lecturer himself " As the preceptorial system evolved, the student had both opportunities, the voice and enthusiasm of the lecturer and the intimate association with the preceptor in the small preceptorial unit By the winter of 1905 Wilson could report to his Board of Trustees that "the reforms have already been effected with ease and enthusiasm " With fifty able and energetic young men to assist the older group who rallied behind Wilson and his leadership, the University could go forward to new heights of achievement A complete reorganization of the courses was undertaken, away from the excessive multiplication and lack of coordination that had characterized preceding years Princeton, under Wilson, drew away from the free elective system as carried to extremes, notably at Harvard The reorganization was "preliminary to all plans for the university for the next generation " Personalized and "guided education" was emphasized The upperclass program was to include "a scheme of related subjects " The seeds here sown matured in the program of independent study that Dean Eisenhart finally achieved during the administration of President Hibben

Effective preceptorial instruction and competent supervision of independent undergraduate study requires a higher order of capacity in the professor than is demanded by instruction through lectures In the lecture course, the professor alone chooses the topics to be expounded and the range and depth of treatment These will be defined by the lecturer's own capacity and its limitations In the preceptorial conference a group of alert young minds, activated by their own studies and inquiries, or at least by a youthful curiosity, choose the area of discussion The demands thus made on the awareness of the preceptor are extensive They can be adequately met only by a competence which includes not only the accumulated knowledge requisite to the proper presentation of lecture material but also the same qualities of scholarship and research, of interest and inquiry

which the preceptorial demands of the student in his weekly contacts with the preceptor

The system thus requires of the preceptor not only the qualities of a teacher but also those of a scholar. The supervision of independent study involves the active intervention of the faculty in processes of research and scholarship. This can be competently achieved only if the emphasis on scholarship among the faculty is acute.

The first fifty years of Princeton University, as successor to the College of New Jersey, can be characterized by this shift of emphasis from teacher to scholar teacher.

The vitality of a community of scholars can be gauged by its unity and its growth. In a college or university dedicated to the liberal studies, unity calls for an ordered pursuit of knowledge and scholarship in the three segments of learning: the natural and physical sciences, the social sciences, and the humanities. The natural and physical sciences are concerned with man in his environment, the social sciences treat of man in his relations with his fellow men, the humanities concern themselves with the inner man, his spiritual being. All three aspects are essential elements in a liberal educational system. There must be unity among these several aspects and there must be substantial development and growth. Neglect of one and excessive cultivation of the others cannot but produce a disorganized whole. The dramatic flowering of modern science as a cultural development demands for it a place in modern education. To the extent, however, that the spiritual values inherent in the study of the humanities are neglected in the pursuit of science, the organic unity of the whole effort is marred. Princeton at the beginning of the present century attained a position where the experiment of unified growth, in a favorable environment, of a community of scholars might well be achieved. It will be instructive to glance back over a period of forty years to see how far this has been achieved, what can be cited by way of

illustration of the effort and its results, what the pattern of the past suggests for the Princeton of the future

The scope of Princeton scholarship is now so broad and the roster of Princeton scholars so large that it would not be possible, within the framework of a single essay, to present the detailed record. The treatment must, therefore, be eclectic and illustrative, must lack the comprehensiveness which the subject deserves. Choice will be made among a large group of topics the selection being determined by utility in illustration of the pattern of growth and development rather than by the contribution as measured in absolute standards of scholarly achievement. Those scholars whose rich service to the community finds here no record, will recognize it is hoped the limitations under which it is necessary to operate, the limitations of space and of knowledge. In the area of the humanities the evolution of a single department has been traced in greater detail than others in order to illustrate how far reaching are the consequences of a well-organized program of scholarly activity. The Department of Art and Archeology furnishes just such a happy illustration. In the field of the social sciences the development of scholarship through the organization of research sections or offices will provide abundant illustrative material. In the physical and natural sciences, Princeton's growth in research and scholarship demanded first of all an accumulation of men interested in the fundamentals of science and secondly the laboratories and technical equipment essential to experimental effort. The level of scholarly achievement in this area will, however, be seen to reach its highest point as the several scientific disciplines merged their own individual values in a joint effort, where the interests of scientific research as a whole prevailed over the objectives of a single constituent unit. Team work among the sciences is well illustrated in the record of Princeton scientists.

Beyond the confines of the University there have grown up in the last three decades extra university centers of scholarship

and research. These, in their own several ways, interacted with the scholarship of the university community. How this occurred must also be recorded by a few suggestive examples.

Historically and by tradition Princeton has been consistently among the strong supporters of humanistic scholarship and classical studies. Toward Princeton, in times of stress and questioning, leaders of education and of affairs have turned for knowledge and experience, and for guidance in the paths of humane education. In 1917, as America entered the First World War, representatives of public life, business, the ministry, law, medicine, science and engineering as well as the humanistic disciplines reaffirmed at Princeton their faith in the values that accrue from devotion to classical teaching and scholarship. They endorsed the famous saying of Plato, "For a man to conquer himself is the first and best of all victories," and they saw that the pathway to the development and cultivation of the spirit in man lies largely in the area of the humane studies. To these studies Princeton has given and continues to give generous measure of effort.

The Department of Art and Archeology is selected from among the humanistic departments for detailed consideration because of its illustration of growth and scholarship in this area.

Although instruction in the arts was not part of the earliest Princeton curriculum, the tradition is now about a century old. Lectures on the arts were delivered at the College of New Jersey by the famous American physicist, Joseph Henry, during his professorship at Princeton. In a formal sense, however, the Department of Art came into existence only after Allan Marquand was appointed professor of art in 1882. The pattern of growth was determined by Professor Marquand from 1895 to 1920 through successive additions to the faculty of such scholars as Howard Crosby Butler, C. Rufus Morey, Frank J. Mather, George W. Elderkin, E. Baldwin Smith and A. M. Friend. The standards of scholarship were defined by Professor Marquand

in 1912 when he began the Princeton Monographs in Art and Archeology with his comprehensive study of *The Della Robbias in America* which was followed by six other studies of the Della Robbia family. In the period since then, more than fifty scholarly publications in art and archeology have issued from the department to maintain the standards he set.

Much of the scholarship developed from important excavations conducted by the department or by members of the Princeton staff associated with others. The Princeton excavations began in 1899 under Howard Crosby Butler. In the hallway of Pyne Tower the Class of 1892 at Princeton has inscribed in stone its testimony to this famous classmate: "Leader in Architectural Education, Explorer and Discoverer of Lost Ancient Cities, Teacher of Awakening Power, Comrade to all his Students, A Pure and Noble Spirit." For his epitaph his classmates caused to be inscribed a Greek Christian inscription which he himself had found in the Syrian Desert.

I sojourned well—I journeyed well
And well I lie at rest—Pray for me

The reference to him as explorer and discoverer of lost ancient cities recalls his several expeditions to Syria and his final work in Sardis, the capital of the ancient kingdom of Lydia. He succeeded where others in earlier years had failed. His death came early, before completion of the Sardis work, which T. Leslie Shear brought to a conclusion.

With the sponsorship of Princeton and three other institutions, the excavations at Antioch, begun in 1932 under the general supervision of C. R. Morey, revealed the ancient capital of Syria and one of the most important cities in the late antique and early Christian world. George W. Elderkin began the actual excavations and W. A. Campbell continued the work from 1934. The material accumulated engaged a large group of the Princeton scholars and graduate students and the work of publication is still in progress. Excavations at Corinth by T. Leslie Shear

and Richard Stillwell for the American School of Classical Studies at Athens were the prelude to the major work of excavation at Athens which followed. Of a different kind were excavations by Professor George Forsyth of the ancient medieval church of St Martin's at Angers.

In recent times Princeton has been intimately involved in one of the most famous of all excavations by American archeologists, that of the Agora of Ancient Athens, conducted by the American School of Classical Studies. Sixteen acres in the heart of the modern city of Athens have been excavated and the site of the ancient Agora has been revealed. Professor Edward Capps, of the Department of Classics and later trustee and chairman of the management committee of the American School of Classical Studies at Athens, pioneered the project and generated much of the interest and enthusiasm which led to the final signal success. The field director was T. Leslie Shear, professor of classical archeology in Princeton; he and his associates spending during the period of excavations through 1940, half of each year at the site, the remainder in the home universities in this country classifying, correlating and reporting the finds. In ten years of effort, the history of the city through a span of 5 000 years was revealed. The periodic rise and fall of the city was traced by the evidence laid bare. Athens became thus a type-city, illustrative of the history of civilization throughout the world from the Stone Age to the early Christian era. The excavation enriched our knowledge of the history and culture of the ancient Greeks, it has enriched, in like manner, the record of Princeton scholarship.

Princeton as a center for scholarly research in the arts has attained its greatest reputation during the last twenty years. Through the wise leadership of C. R. Morey it became one of the great centers for the study of medieval art. He himself "linked early Christian art with its antique sources" and "traced the continuity of style through the strange centuries that witnessed the transformation of a pagan into a Christian Mediter-

anean world" With his encouragement, E Baldwin Smith produced a definitive work in the field of early Christian iconography, and Professors Friend, DeWald, and Westzmann built up the most complete collection of photographs of medieval book illustration in the world With this asset the Princeton scholars could go forward with plans for comprehensive study of Byzantine illuminations and illustrations in the manuscripts of the Septuagint Morey promoted the formation of the Index of Christian Art as an instrument of research His department was chosen by the Vatican for the task of preparing the catalogues of the Museo Sacro in Vatican City He encouraged the department's venture into Far Eastern art under Professor George Rowley Meanwhile, Princeton trained scholars went out to many of the major professional positions in universities and museums, to foreign centers of art and archeological study

In these many ways the Department of Art and Archeology exhibits at its best the ideal of a community of scholars In the development of architecture and music studies at Princeton the process of growth by fission is to be traced in the same department

Following a plan laid down by Howard Crosby Butler, a curriculum leading to the degree of Master of Fine Arts in Architecture was developed in 1919 The School of Architecture, thus established, emphasized the need in architectural education for a school differing radically from the typical architectural school By its development within the Department of Art and Archeology the School stressed both good preliminary general education and also a thorough training in the history of architecture and allied arts Cooperation with the School of Engineering was arranged On these foundations a complete professional School of Architecture has been developed, the quality of whose work is described by the numerous honors, prizes and awards that its students have achieved They are a signal tribute to its director, Professor S H Morgan and its distinguished professor of architecture, Jean Labatut

More recently, the study of music as one of the arts was assisted, through its formative years of growth, as a section within the Department of Art and Archeology Professors Welch, Sessions and Strunk built up the program of work and scholarship through those early years. They insisted on a broad cultural basis for scholarly work, at the same time refusing to sacrifice the urge toward self expression by creative effort among its students. The compositions of Edward T. Cone, Carter Harman and Andrew W. Imbrie, who were among those students, are compelling evidence of the high standards of artistic achievement that may be realized in this manner. Professor Randall Thompson, as successor to Professor Sessions in the field of musical composition, provides, in his own work, the inspiration for continued effort in this field. In the Bicentennial year of 1946 the Department of Music bade farewell to its guardian in the days of its youth and embarks on the duties and opportunities of separate departmental life.

The above comment on the Department of Art and Archeology is presented as a case study of scholarship in the humanities. The complete record of Princeton's contribution to humanistic scholarship would necessarily include notice of signal successes in the study of classical, oriental, medieval and modern languages and literature and of philosophy. Here they may be mentioned only in briefest reference. Classics at Princeton, in the early decades of the present century, maintained a position unequalled elsewhere in the United States. Capps in Greek epigraphy, Johnson and Magie in the history of Roman institutions, Prentice, Wheeler and Stuart in monuments of Greek and Latin literature, West in the Latin Fathers are illustrative of a catholic presentation of many aspects of classical scholarship. Paul Elmer More knew how to interpret the Greek tradition, for humane living in our time. Today Princeton renews its conviction in the classical ideals which it cherishes, constantly seeking new modes of presentation of ancient values.

In Oriental Languages and Literatures scholarship at Princeton has been concerned with linguistics generally and the Indo European field in particular, while, more recently, the study of Arabic and the culture of the Near East has become one of Princeton's major scholarly activities. Professors Enno Littmann, Bender and Hitti are among those who have cultivated these fields with distinguished results. The David Paton collection in Egyptology and Assyriology, The Brunnow Collection of Oriental Literature and the Robert Garrett Collection of manuscripts are among the notable adjuncts of scholarship in this field that have accrued to Princeton from these efforts.

Scholarly objectives in medieval and modern languages range from Chaucer to modern times in English, from the French and Spanish medieval poems treating the legendary history of Alexander the Great to modern French and Spanish literature and culture. In English literature one thinks of Harper and Parrott, Osgood, Root, and Gerould, Bliss Perry, C W Kennedy and Hoyt Hudson. The roster in French, Spanish and Italian would include Armstrong, Mackenzie Marden and Castro. Christian Gauss and Gilbert Chinard added a mature scholarship in the history of ideas to their competence in language and literature.

Nor would the record of humane scholarship be complete without a detailed study of the philosopher at work in Princeton. The tradition begins in modern times with President James McCosh who was the first Stuart Professor in the History of Philosophy. Before and after he assumed the presidency of Princeton University, John Grier Hibben continued the tradition both in logic and philosophy. The breadth of the effort and the scope of the studies would be revealed in the examination of the works of Norman Kemp Smith and A A Bowman, loaned to us from Scottish universities for fruitful years of service here; of Walter Stace who came from Ireland via Ceylon, of Warner Fite, T M Greene, of C W Hendel and others who explored logic, ethics and aesthetics and carried

their philosophical views by book and spoken word to many other centers of philosophical scholarship

Scholarship in the social sciences at Princeton illustrates the development of a group of research sections and offices in which major contributions to the solution of social problems have been and continue to be achieved. Several of these typify growth from within the University with a major impact on life outside. In other cases Princeton as a center of scholarship has attracted to itself a program of research and scholarship originating elsewhere. The Industrial Relations Section of the Department of Economics and Social Institutions, the International Finance Section of the same department, and the Princeton Surveys are excellent examples of the former, while the Office of Population Research is illustrative of research brought from elsewhere to grow and develop in Princeton.

The Industrial Relations Section exemplifies the role of scholarship in the larger interests of human relations. The section was established in 1922 at a time when industrial relations problems had become especially acute by reason of readjustments following World War I. The purpose of the studies was to be the increase and extension of basic knowledge in industrial relations, including personnel administration, labor relations, trade union organization and policies, labor and social security legislation. Initially, the activities embraced the maintenance of a special library, participation in the University's instructional program, research by staff members, the organization of conferences and consulting services. Housed in the main University Library building it could be closely coordinated with cognate studies in history, finance, public affairs and social relations. While the University provided the salary of its director (originally Professor R. F. Foerster, later succeeded by Professor J. Douglas Brown) and also the overhead expenses involved, the necessary additional stimulus came from Mr. John D. Rockefeller, Jr., through annual gifts and later through

endowment by himself and his son, John D Rockefeller 3rd From the outset, on the initiative and suggestion of Mr C J Hicks, a leader in the field of industrial relations, the Section has enjoyed the generous support of both industrial management and organized labor By 1931 it was obvious that its function must go beyond service as a clearing house of ideas and experience, and that it must expand its usefulness by bringing together in conference the several interests which its scholarly effort was designed to reach Annual conferences, each of several days duration were arranged, and at the thirteenth annual session in September 1945 representatives of eighty nine companies employing three million workers attended the conference In these conferences Professor D A McCabe, who has specialized in labor problems from the point of view of the worker, has contributed his specialized knowledge to the maintenance of a just balance in such a complex field

The technique of the conference as developed by the Industrial Relations Section was adopted by the University for the celebrations of its Bicentennial year, 'applying, in consultation with scholars throughout the world, our common skills, knowledge, and wisdom to the reconsideration of the fundamental obligations of higher learning to human society, hoping thus to contribute to the advancement of the comity of all nations and to the building of a free and peaceful world"

For the nation as a whole, for governmental organizations under a succession of presidents, the Industrial Relations Section has operated to provide rapidly and on demand the best impartial data, information and recommendations that could be assembled It has served state and national agencies with materials concerning social security, techniques of stimulating production and labor utilization which have been invaluable in the recent years of stress It can look forward after more than twenty years of effort to an enhanced activity that will result from its more extended permanent endowment recently secured, largely from those industrial organizations and labor unions

that, by its efforts, it has already abundantly served. In the critical years ahead it will be a continuing example of Princeton in the nation's service.

The International Finance Section of the Department of Economics was endowed in the year 1930. Two years earlier Edwin W. Kemmerer had become the first incumbent of the Walker Professorship of International Finance after twenty-six years as professor of economics in Princeton. During those years he had been engaged as financial adviser to a large number of governments prior to, during and in the years following World War I. His book, *The ABC of the Federal Reserve System*, first published in 1918 immediately after the establishment of that system in the American banking world, passed through eleven successive editions, and was the standard handbook for laymen as well as scholars, and *Modern Currency Reform* is one of his numerous books addressed to scholars.

The International Finance Section was organized to develop and carry out a program of research and instruction. Monographs and essays were prepared, and scholars were trained for service as experts in this field. Literature in the fields of budgets, expenditures, taxation, public debts, currency and banking in foreign countries, as well as material on general economic and financial problems, was assembled in the Benjamin Strong Collection of Foreign Public Finance, housed and administered by the University Library.

To maintain a catholicity of viewpoint, the University balanced the Kemmerer "gold standard" conservatism with the more radical concepts of Professor Frank D. Graham, embodied for example in his volume *The Golden Avalanche*. Against the possible dangers of "Big Business" dominated by bankers, the University offered in the person of the outstanding theoretical economist of his time, Professor Frank A. Fetter, a cool critical analysis of the peculiar problems of monopoly and monopolistic control. In such hands, Princeton's scholarly effort in economic matters grew and prospered. The University, by its appointment

of Jacob Viner as the second incumbent of the Walker Professorship, has indicated its determination to maintain its high standards of scholarship in the field of international trade and finance

Princeton is indebted to its successive presidents not only for their able administration of educational affairs but also for their own scholarly efforts and initiation of research projects To President Dodds, with his broad background of experience in problems of local administration and state and national affairs, is to be attributed the initiative and inspiration which led finally to the development of the Princeton Surveys Under the leadership and direction of Dr Dodds there emerged not only the first specific survey of New Jersey State government but also concrete legislative proposals to correct the inherent weaknesses in government which the survey revealed These in their turn led to comprehensive university programs surveying the detailed character of government and finance in both state and local government The Princeton Surveys provide not only a laboratory for graduate students, but also an asset of great value to the executive and legislative bodies in the state and its communities by reason of the dispassionate analyses of the pertinent data thus secured Under the leadership of Professor J F Sly the findings in financial matters and governmental problems have been translated into significant legislative enactments for the improved conduct of public affairs

It was Woodrow Wilson's scholarship in the field of history and jurisprudence which led, through the presidency of Princeton, to the larger stage of leadership in national and finally international affairs His analysis of the history and problems of American government were an inspiring prelude to Princeton's more recent scholarly activity in history and politics Professor T J Wertenbaker has surveyed the early American scene, American colonial history, and has known how to relate the houses which the early settlers built and the organizations which they developed to the homes and institutions that they

left behind in Europe. C. H. McIlwain, one of Wilson's fifty preceptors, has excelled in the historical aspects of constitutionalism from the ancient Greeks to the modern world. As Eaton Professor of the Science of Government in Harvard he has found time also to assist historical scholarship and the welfare of his alma mater as trustee of Princeton University. Dana C. Munro, in medieval history, notably in the history of the Crusades, attracted to Princeton distinguished students who carried his ideals of scholarship to academic positions in various universities across the land. The complete record would include many others. R. J. Sontag as historian of nineteenth century England and Germany, and Julian P. Boyd as historian of early America and editor of the Jefferson papers may serve as illustrative of the broad scope of scholarly activity in history that is enriched today by frequent association between the University faculty and their colleagues in the Institute for Advanced Study.

The mantle of Wilson in the field of political science fell upon Edward S. Corwin, an original preceptor and McCormick Professor of Jurisprudence since 1918. In this position he has, down to present time, concerned himself with brilliant and authoritative interpretation of the Constitution in its varying impacts with changing times, involving states rights, the power of the Supreme Court, treaty power versus state power and more recently the Constitution in its relation to world organization. Professor Harold H. Sprout in his studies of naval history and policy and by his examination of the foundations of national power has opened up new fields of scholarly research in the field of politics. In these pursuits he has found an able collaborator in his wife and a distinguished counsellor and friend in Professor Edward M. Earle of the Institute for Advanced Study.

The Office of Population Research came to Princeton because its sponsors realized that a program of work originated in New York under the sponsorship of the Milbank Fund

required something more than the interest of professional demographers, that to be more effective it should enlist the attention of scholars in fields to which it is relevant. Frederick H. Osborn, himself an established scholar in the field of demography, persuaded the officers of the Milbank Fund that such a transfer of a portion of its effort was desirable, and in turn persuaded Princeton University that it could provide the setting in which such an effort could grow. Ten years ago the Office of Population Research was established in Princeton under the leadership and direction of Professor Frank W. Notestein. It was already in effective activity when the wartime demand for demographic work on the part of the League of Nations and the U. S. Department of State arose. In a brief decade it had so well established its usefulness in a scholarly community that the Rockefeller Foundation was ready with support for a further ten years of effort.

The University environment made it possible to extend the scope of research beyond the field of formal statistical demography to the social, economic and political aspects of population problems. A series of books and monographs issued in recent years by the Office illustrates this larger conception of the program. *The Future Population of Europe and the Soviet Union*, 1944, *Demographic Studies of Selected Areas of Rapid Growth*, 1944, *Economic Demography of Eastern and Southern Europe*, 1946, current studies on India, South Africa, Latin America, Japan and Palestine are evidence of such broader concepts. The Office publishes in cooperation with the Population Association of America a *Population Index*. One section of this index is devoted to compact analyses of topical demographic situations. In addition the index carries the most complete bibliography of demographic materials published anywhere in the world, with abstracts of current international literature in this field.

The research work of the Office enlists a professional staff of six, mainly sociologists with different specialties in the field.

and differing subsidiary fields. Instruction is offered at both the undergraduate and graduate levels. The Office personnel is also available for consultative duties. During the war, through contracts with the Department of State, demographic data for policy forming levels in the Department and special materials for the San Francisco Conference were prepared. Such agencies as the Office of Strategic Services, the Census Bureau, the Council on Foreign Relations, the Anglo American Commission on Palestine, also made use of the expert advice and assistance which the Office can supply.

The place of population research in studies of economic, social and political institutions has been richly justified by the achievement of these several efforts. The placing of the Office in Princeton has enlarged the University's horizons and enhanced its own capacity for growth and service.

Growth and progress in the physical and natural sciences depend upon the initiative and research of able investigators at work not only in their libraries and studies but also in laboratories where their intuition or projections of further progress can receive experimental test. Men of distinction and laboratories with adequate facilities are both essential. President Wilson laid upon Dean H. B. Fine the responsibility of shaping the origins of the great modern developments in science in Princeton.

In the area of mathematics the problem resolved itself into that of assembling a group of able mathematicians. Eisenhart and Veblen, Bliss and Birkhoff were brought to Princeton and travelled by this route to the National Academy. Wedderburn was among these same young mathematicians in the years 1905 to 1910, and by his work in algebra eventually won Fellowship in the Royal Society of London. The Princeton school of differential geometry and a school of topology were born. Alexander, Lefschetz, von Neumann and others were later recruits, continuing the tradition which had been established. Princeton's

strength in mathematical scholarship became so great that, when the Institute for Advanced Study was initiated in Princeton, a segment of the department became the nucleus of the new effort in post-doctoral education. This process of fission and subsequent growth led to even greater stature of the Princeton community of scholars in this field, so that Harald Bohr of Copenhagen could well remark, at the Oslo Mathematical Conference in the 1930's "Princeton, the mathematical center of the world."

Similar good fortune attended faculty selections in the other sciences. To physics came Sir James Jeans and Owen Richardson who later won the Nobel Prize for his work on electron emission work largely completed in Princeton between 1906 and 1914. Clinton J. Davisson, Nobel Prize winner in 1937, Karl T. Compton, and Arthur H. Compton, Nobel laureate in 1927, were of the first generation of graduate students in this field. Van Ingen Sinclair and Smyth came to geology and with Smyth graduate students from all the major geographic sections of the United States and Canada. Fine entered into a happy conspiracy with Wilson in 1907 to invite Edwin Grant Conklin to Princeton. The next spring he was elected to the National Academy in the biological sciences and joined the Princeton faculty in the fall of the year 1908. Conklin in his turn advanced research capacity in biology by calls to G. H. Shull in botany in 1915 and to E. N. Harvey in physiology in 1916. Russell returned from Cambridge, England, and Dugan from Heidelberg as instructors in astronomy in 1905 while Hulett came in the same year as assistant professor in physical chemistry to pioneer in this new field and, through all trial and adversity, to continue faithful to the tradition of untiring research. With men of such stature a vigorous scientific growth was possible.

The provision of adequate facilities for laboratory investigations and research dates from the same period. The Palmer Physical Laboratory, completed in 1908, became the home of Richardson's famous researches on electron emission, of Karl

T. Compton's on the electrical discharges in gases and more recently of the researches in atomic physics centering around the cyclotron. Guyot Hall, in 1909, housed the investigations of Conklin in cytology, became also the headquarters of Scott in the geological sciences. Chemistry lingered two more decades in the old chemical laboratory just off the campus on Washington Road and Nassau Street and in various odd rooms in the basement of the School of Science. They were years of diligent research and growth, reaping their rich reward in the Henry C. Frick Laboratory in 1929. Eno Hall, the gift of Henry Lane Eno and Professor Howard Crosby Warren, had already in 1924 provided offices, laboratories and classrooms for scholarship and research in psychology. Astronomy stayed in the Halsted Observatory until this was moved to its present site beyond the Stadium in 1934. Through the generosity of Mr. Thomas D. Jones and Miss Gwethalyn Jones of Chicago, the Fine Memorial Mathematics Building completed the laboratory facilities in science at Princeton with an outstandingly beautiful and practical home for mathematics and mathematical physics.

Immediately after World War I when the impact of that conflict had revealed the necessity for expanded training in both the physical and natural sciences a step was taken which had decisive influence in the growth of scholarship and research in Princeton. With financial grants from the Rockefeller Foundation, the National Research Council in Washington initiated a series of post-doctoral research fellowships in astronomy, chemistry, mathematics and physics and also in the biological sciences. These fellowships were designed to build up a body of scientific personnel from which a large group of college and university professors, necessary to the growth of the country's scientific effort, could be drawn. From the outset of this program through all the years between the two wars, Princeton took a leading part, supplying from the ranks of its own graduate students candidates for post-doctoral fellowships in the other university centers of this country and abroad, and re-

ceiving as post doctoral fellows in Princeton a considerable fraction of the fellows appointed from elsewhere. The statistics of these appointments were at once a proof of the excellence of the graduate work in the sciences at Princeton and of the facilities for advanced scientific research that the University already possessed. The work of the National Research Council fellows at Princeton contributed in no small measure to raising the level of scientific scholarship and research in the University. It provided the faculty with skilled assistants for advances into the outer frontiers of basic science, enlarged the horizons of the graduate student body in residence and increased the volume and quality of research produced. In return, the University handsomely contributed facilities for the welfare and progress of the work. More than any other institution for higher education in the land, Princeton gave and received strength for the advancement of fundamental science in this particular program.

The realization of its own peculiar capabilities in the field of scientific research led ultimately to a consolidation and coordination of the whole scientific effort. By 1926 it was realized that Princeton could use profitably much larger resources for science than were yet available to it. As a result of a special campaign, with a conditional gift of \$1,000,000 from the General Education Board as a spur, an additional \$2,000,000 was raised from alumni and friends for the endowment of scientific research at Princeton. The achievement of this objective resulted in the establishment of six research professorships—in astronomy, biology, chemistry, mathematics, mathematical physics and physics—and the establishment of a Scientific Research Committee advisory to the president in all matters pertinent to scientific research in the several departments of science. This unified approach added strength to the total scientific effort. It led to the call of distinguished scientists to the University's scientific faculties. The appointment of von Neumann in mathematics, of Wigner in mathematical physics, of Swingle in biology, Bray and Wever in psychology, of Eyring in theoretical

chemistry and Wilks in statistics are excellent examples of the new personnel that came to Princeton as a result of this community of effort. It made possible a stream of distinguished visiting professors among whom may be named Weyl, Lemaitre, Schrodinger, Dirac, Levi-Civita, Bohr and many others.

The years of World War II were the testing-time of Princeton's place in American research science. The evidence is twofold, in the volume of work carried out by Princeton's scientists in the Princeton laboratories and in her contributions to research efforts in other centers of effort here and abroad. Major fractions of all the scientific staffs were so engaged throughout the war years. In physics Princeton scientists took a leading part in the initiation and prosecution of the research that led to the atomic bomb, with efforts first in its own laboratories and later at Chicago, at Hanford, Washington, at Oak Ridge, Tennessee, and at Los Alamos, New Mexico. In Henry D. Smyth Princeton provided the historian of the whole effort. In chemistry the staff was concerned with the atomic bomb in British Columbia, New York and Oak Ridge, with chemical warfare, synthetic rubber, explosives and biochemical problems in addition. Mathematicians and astronomers took their part in statistical, ballistic and meteorological researches, biologists in a variety of physiological problems. The new generation in geology, including Buddington, Sampson, Thom and Hess, made their contributions in the evaluation of lower grade mineral resources, in coal and oil, in the charting of submarine strata. The psychologists broke new ground in the application of their techniques to problems of modern warfare. Government contracts with the University in these areas totalled upwards of \$5,000,000.

The era of atomic science which the war ushered in is not without its own peculiar problems for the post war university. There will need to be heavy expenditures for rehabilitation in some of the science departments. For all, there will be necessary a large measure of careful thought and deliberate planning that the immense rise in scientific stature of Princeton during

the last fifty years shall be but a prelude to an increased contribution to, and a more intense participation in, the developments of fundamental science and scholarship in the decades ahead. America has assumed a position of major responsibility for the scientific and technological development of modern civilization. Princeton's share in that effort must continue to grow in volume and importance.

Much of the success which attended the technological effort in America in support of the armed services is traceable to the training of engineers to meet swiftly, and to master, problems requiring new applications of basic engineering principles and processes. President Hibben once summed up the program in the School of Engineering in the phrase "Engineering Plus." The school was established in 1920 by coordination of the Department of Civil Engineering started in 1875, with the Graduate School of Electrical Engineering established in 1889. As Dean Arthur M. Greene organized the school, programs in chemical engineering, mechanical engineering and mining engineering were added to the curriculum. Under Dean K. H. Condit, programs of instruction in basic engineering and aeronautical engineering have been built up to divisional status in the school. The emphasis in all these developments in engineering has been largely on education in the principles of engineering rather than on strictly vocational education. Fifth year courses as developed in Princeton beyond the four year bachelor training have helped to produce engineers who could thus meet new problems in technology. That they were effective is in large measure due to the scholarship displayed by such men as Elgin Whitwell and Wilhelm in chemical engineering, Beggs, Timby, Tschebotarioff and Winterkorn in civil engineering, Willis and Johnson in electrical engineering, Moody in mechanical engineering, Sayre and Nikolsky in aeronautical engineering and Thom in geological engineering. It is in the natural process of evolution that several of these departments now proceed to more advanced levels of education in engineering, at the doctorate

level The range of engineering research at Princeton is expanding qualitatively and quantitatively

Princeton University is only one of the institutions forming the Princeton community of scholars Princeton Theological Seminary has been continuously in association with both college and university throughout their years of common history and each has contributed to the intellectual effort of the other in a spirit of reciprocal cooperation The Theological Seminary Library has been freely placed at the disposal of students of the University and its faculty Members of both institutions, with mutual interests in scholarship and research, have pooled their facilities in a continuous and continuing pursuit of new knowledge in many areas

The suitability of Princeton as a location for an extra-university scientific research institute was first indicated by the decision in 1914 to establish the Rockefeller Institute for Medical Research, Department of Animal Pathology, across Lake Carnegie three miles southeast of Nassau Hall Under the leadership of Dr Theobald Smith a group of scientists was assembled and laboratories were erected in which fundamental researches could be continued in those areas of pathology and parasitology which Dr Smith had already demonstrated could be so fruitful in results Dr Conklin and the faculty of biology in Princeton University cooperated wholeheartedly in the furtherance of the plans Dr Smith was succeeded on his retirement in 1927 by Dr Carl Ten Broeck, who became acting director in that year and director in 1930 Plant pathology under the leadership of Dr Louis O Kunkel was added and the enterprise grew The Rockefeller Institute for Medical Research thus provided in one organization for the study of disease as it occurs in all the main orders of living things At Princeton it became also the home for scientists who found the location more congenial to their efforts than the Rockefeller Institute for Medical Research, the parent enterprise in New York Here Dr John H

Northrop (a 1946 Nobel Prize winner) and his associates in general physiology solved the problem of crystallizing enzymes and demonstrated their character as individual molecules. Here also began the studies on viruses which resulted in the production of crystalline tobacco mosaic virus by Dr Wendell M Stanley, who shared the 1946 Nobel Prize with Dr Northrop. Dr N R Stoll developed techniques of study of hookworm infection. Dr R E Shope specialized in diseases of swine, filterable tumors in rabbits and pseudo rabies. When World War II arrived, the staff and facilities were swiftly enlisted in a variety of medical problems that warfare brought in its train. The study of virus growth, such as that of influenza by the chick embryo technique, is an outstanding illustration of this phase of the Institute's war work, growing out of the earlier work on plant viruses.

When Dr Abraham Flexner called upon his friends in the Princeton University faculty for advice on the establishment of an Institute for Advanced Study which, at the wish of the founders, Mr Louis Bamberger and Mrs Felix Fuld, was to be established somewhere in the neighborhood of Newark in New Jersey, Professor Oswald Veblen (then Jones Professor of Mathematics in the University) observed that Dr Flexner actually had only one problem to solve. He had to determine whether Princeton was in the neighborhood of Newark. Behind the remark was a recognition that if an institute for post-doctoral studies was to be brought rapidly into existence in the state it would almost of necessity be located in or near Princeton. Only in Princeton, at that time, did there already exist the facilities, especially the library and learned journals, which would permit an early start on the proposed new educational effort. Other factors influenced the decision in favor of Princeton. Mathematics became the initial unit in the new Institute. The availability of space in the newly opened Fine Hall made it possible to house the first members of the Institute's mathematical staff with Veblen, Einstein, Alexander and von Neu-

mann as the early members, with Weyl and Morse to follow. Fine Hall remained their headquarters until the new Institute building, Fuld Hall, became available. The Art and Archeology Department became similarly the hosts of the new section of Humanistic Studies while Professors Panofsky, Herzfeld, Lowe, Merritt and others were brought to the staff of the new foundation. Between the Institute and the University there existed from the outset the closest collaboration and interchange of facilities. Institute seminars were available to University faculty and graduate students. The Institute staff offered graduate courses and seminars on selected topics. In the division of Social Sciences subsequently established in the Institute, staff members and University faculty collaborated in special projects. A seminar on problems of strategy, under the leadership of Professor Edward M. Earle, resulted in an outstanding book, entitled *Makers of Modern Strategy* which is a striking example of the results of such collaboration.

When France was overwhelmed in 1940 and the technical divisions of the League of Nations in Geneva were isolated from contact with the outside world, the economic sections of the League were extended a joint invitation by Princeton University, the Institute for Advanced Study and the Rockefeller Institute to continue their research at Princeton. The Institute for Advanced Study became their new headquarters and the work continued in Princeton without break during the war years, making possible the uninterrupted accumulation of those economic facts and data which the United Nations Organization requires in the post war world.

The College Entrance Examination Board maintains its headquarters in Princeton in offices leased by the University. Since the pioneering days of Professor Carl C. Brigham of the Department of Psychology the contact between the Board and the University has been close and intimate. Here the techniques of measurement of student abilities have been assembled and critically examined. At the present time, Professor H. Gulliksen

divides his efforts between the Board and University, to their mutual advantage

In the area of public opinion testing and measurement, the presence in Princeton of the Gallup and Crossley Institutes assists the interest of a scholarly community in the problems of psychology and political science. The work of Professor H. Cantril in the University parallels these extra university efforts. In sponsoring the publication of the *Public Opinion Quarterly* by Princeton University Press, the University contributes also to the techniques of scholarship and measurement in this field. Professor H. L. Childs has rendered conspicuous service in this area of scholarship.

The development of modern industrial scientific research brought to Princeton in 1942 an outstanding asset in the laboratories of the Radio Corporation of America. Especially in the fields of physics, chemistry, mathematics and communications engineering will this influence be most pronounced. Scientifically motivated industries now recognize that over and beyond the development of new applications of basic science it is essential that industry itself participate in the problem of enlarging the frontiers of fundamental science, and they have found that such effort can yield rich dividends. The central research laboratories of organizations such as the General Electric Company at Schenectady, the Bell Telephone Laboratories at New York and Summit, N. J., the Westinghouse Laboratory at Pittsburgh, the Experimental Station of the DuPont Company at Wilmington, the laboratories of the Standard Oil Development Company at Linden, N. J. and of the Shell Oil Company at Emeryville, California, together with the research laboratories of the several rubber companies in the Akron area are all illustrative of this development in industrial research. Much basic science issues from these centers. What the Radio Corporation of America did in variation of this technique of research effort was not only to withdraw it from the production units of the company but to place it close to a community of distinguished scientists

What has thus far been achieved in collaborative effort has been restricted by the circumstances of secrecy which surrounded scientific activity during the war years. Within the last year, however, it has already been demonstrated how industry, the University and the Institute for Advanced Study can operate in a closely coordinated effort toward the production of new computing devices. It has revealed how the industrial research laboratory with rich equipment facilities can materially assist in developing the ideas of the fundamental scientist, itself receiving due measure of reward from contacts with the fertile minds of the fundamental scientist in institute or university. The University draws strength not only from contributed funds and elaborate instruments, such as the electron microscope, which the industrial laboratory freely places at its disposal, but also from the abundant manpower in the industry which enlarges the total scientific personnel and markedly increases its potential.

The newest arrival among the extra university institutions in the Princeton area is the Textile Foundation and the Textile Research Institute's program of research and education. This experiment directly involves the University. It represents an attempt on the part of a group of decentralized industries, operating in widely distributed units with only a relatively small number capable of prosecuting research, to engage in the support of science and scholarship basic to their industry. It has several objectives: the prosecution of fundamental studies in the general field; its physics, chemistry, biological, engineering or economic aspects; the dissemination of research information in these several fields; the training in the methods of research of specially selected personnel at the graduate student level. Association of this Institute with Princeton University has advantages for both. Each can enlarge its own research horizons, each can supplement the other's activities with personnel and facilities. The Institute is maintaining a group of textile fellows who are candidates for the Ph.D. degree in the University,

receive their general education at the graduate level in the University, their special training and their research experience at the laboratories of the Institute at Kingston on the north shore of Lake Carnegie

The student constitutes an essential element in a community of scholars. To this problem of the student, at both the graduate and undergraduate levels, Princeton has devoted especial care. In the processes of reorganization that Wilson initiated, the development of a strong group of graduate students between the undergraduates and a faculty of able and energetic scholars was an essential step and a necessary asset to a developing body of preceptor-scholars. Toward such an objective Andrew Fleming West had directed all his efforts since the Sesquicentennial years. In conformity with Princeton tradition and with the concept of Princeton as a community of scholars, such a body of graduate students, pursuing the tasks of higher scholarship training for the succession in their several fields of endeavor, should be housed in a residential graduate college. In harmony with Princeton's general educational ideals, the emphasis in the Graduate School should be on quality with a firm restriction on quantity. There grew thus a unique effort in graduate school education in this country, a community of scholars pursuing graduate studies in their several fields of specialization but sharing a common way of life in a setting of surpassing loveliness in the shadow of the Cleveland Memorial Tower, which became, 'more than any other outward feature, the mark, the symbol of Princeton.' The Wyman Fund and other bequests and the Procter Fellowship endowment made it possible not only to provide for the housing of the graduate students on a high material level but also to ensure a catholic selection of promising scholars drawn not only from the other sections of the country but also from Canada, Great Britain and France. With the development of the Rockefeller program of international fellowships the Graduate College assumed a still more

cosmopolitan aspect, retaining until the onset of the late war all the best features of a college of international scholars.

The graduate student is a continuing and vitalizing influence in the body of scholarship and from this source comes renewal and strength. Where the quality is high, there an advanced level of achievement can be maintained. The graduate student body continually reproducing itself in the university environment gives to this a character and a potential that other centers of scholarship lack. Is it significant, or is it merely attributable to the recent origins of the industrial research laboratories, that, as yet, the major contributions in basic scientific research in large measure still stem from the university laboratories? Is this fertility in new science to be ascribed only to the greater freedom of scientific inquiry that the university offers, or does it in part depend on the constantly renewed sources of scholarly personnel in these areas? Are the industrial research laboratories, so to speak, sterile, because they lack this same measure of annual renewal, depend only on attrition through age or expansion in scope to make way for new and younger personnel? The professor in charge of graduate work or supervision of doctoral theses has something of the opportunities of the prospector, searching for gold. The ore in the Princeton Graduate School has been rich and profitable.

Two Nobel prizemen and several university presidents spent their graduate years in Princeton. Directors of industrial research and professors of chemistry in major institutions, astronomers in Harvard, Yale, Mount Wilson and other centers gained their first research experience in Princeton. Scholarship in art, in the classics, in language and literature, in philosophy, history and the social sciences has drawn heavily on Princeton graduate students for continuing service. Statesmanship, government, national and international affairs have utilized in great measure the Princeton product. The records of the war years when they are compiled will reveal how fruitful in national

service the Graduate School in Princeton has been. The Princeton faculty also draws new strength from this same source.

No record of Princeton as a community of scholars would be complete without some record of the part which the undergraduate now plays so successfully in support of the total endeavor. In a manner which the alumni of the 1890's could with difficulty have envisioned, large elements of the undergraduate body begin significantly to contribute to the scholarship of Princeton in their upperclass years through the vehicle of independent study. With integrated programs as for example, the Divisional Program in the Humanities, students of more than average ability step up the pace of their departmental concentration and spend a final year in special course work and study planned to yield a senior thesis of outstanding quality. No Princeton professor is any longer surprised if one of these theses becomes a full scale book which runs the gauntlet of the reviewers not as a first effort of an undergraduate senior but on its own merits. Groups of senior theses in science have been skillfully blended by a supervising professor into a single major contribution in the field. The Franklin Medal lecture of the American Philosophical Society in 1941 was based wholly on a single senior thesis. Since these theses grow under the guidance and direction of a faculty adviser there arises an intimacy and close contact between scholar and disciple which at its best still further stimulates the growth of and love for scholarship in the younger man, fortifies the enthusiasm of the older man, helps to keep him young in spirit if not in years as he hands on the torch.

Take thou the splendor, carry it out of sight
 Into the great new age I must not know
 Into the great new realm I must not tread

The torch of scholarship can be eternal, enkindled anew by each passing generation of scholars until the end of time. The brightness of its light is measured by the brilliance of its scholar.

COMMUNITY OF SCHOLARS

ars and their scholarship Princeton is at the end of an era—the era of the first preceptors—which coincides with the end of the second century of its history For fifty years the torch has burned with a brilliance never exceeded in Princeton's earlier years A new generation, in a new century, takes up the task,

Dei sub numine," to feed the flame with yet higher measure of achievement

Teachers and Teaching

BY ROBERT K. ROOT

WHEN, on the occasion of celebrating one hundred and fifty years of corporate existence the College of New Jersey assumed in 1896 the title of Princeton University, it assumed also a very serious obligation to live up to its new designation. A very good college undertook to make of itself a distinguished university. During the fifty years that have since elapsed this obligation has been handsomely met. No one familiar with higher education in America would question that Princeton has measured up to the more ambitious title of university. But it is a university of a special sort which is distinguished by the quality of its activities rather than by their multiplicity. It has no schools of law, medicine and divinity, though it profits by the near presence of its neighbor, the Princeton Theological Seminary. Its province is solely that of the liberal arts and sciences and the applied arts and sciences of engineering and architecture. Within this region, both at the undergraduate and the graduate levels it has achieved and maintains high distinction both in the fields of teaching and research. It has within its fifty years as a university built and equipped fine laboratories and has assembled in its library a great collection of books for which it will presently have an adequate building. Most important of all, is the character of its faculty. Princeton is committed to the principle that effective teaching and fruitful investigation should be, and can be, complementary activities of a single personality, the scholar teacher, that the most stimulating transmitter of knowledge is the one who is also actively advancing its frontiers, and that the investigating scholar will best keep his perspective and sense of values if he is spending part of his time in the undergraduate classroom. Some of Princeton's most productive scholars insist on having frequent opportunity to teach freshmen.

Princeton has thus maintained its character as a university without losing the character of a college. With combined undergraduate and graduate enrollment held in normal years to a maximum of 2,700, the individual student is not submerged by sheer weight of numbers, and for many decades the ratio of teachers to students has been about one to every eight. With the small conference groups of the preceptorial system, and the individually directed work of upperclass concentration, there are exceptional opportunities for close personal contact of the teacher and the taught, opportunities as great as if not greater than those offered by a small college, and the teacher whom the student thus has a chance to know is of the sort appropriate to the faculty of a great university. It would not be easy to find any other institution of higher learning where scholars of wide distinction are so accessible to the rank and file of undergraduates.

During Princeton's half century as a university college, its undergraduate students have had the privilege of initiation into biology under the personal direction of Edwin Grant Conklin, into astronomy under Henry Norris Russell, into geology under William Berryman Scott. They have learned to read great literature with fuller understanding from George McLean Harper and Charles Grosvenor Osgood, they have learned from Frank Jewett Mather and Charles Rufus Morey how to interpret the masterpieces of the great painters. Woodrow Wilson, Edward Samuel Corwin, and Frank Albert Fetter have been their teachers in the social studies. This is but a very incomplete enumeration, *chosen from among those who have completed, or are about to complete, their active service on the faculty, of men who exemplify the principle that the productive scholar can be also the most provocative teacher.* The tradition is being ably continued by younger colleagues who have many years of active service still ahead of them.

Princeton's character as a university college is reflected also

in the character of its curriculum, which involves, particularly in the upperclass years, a large measure of independent work. The undergraduate has at his disposal expert guidance from a faculty director, but is expected to take on his own shoulders the final responsibility for the mastery of his own chosen field of study.

The course of study in the liberal arts at Princeton at the beginning of the present century, like the curricula of many other American colleges, consisted of a combination of uncontrolled undirected free election and rigid prescription. The program of freshman year required four hours each of Latin, Greek, and mathematics, two hours of English (with a choice between rhetoric and oratory), and two hours of either French or German. Sophomores were required to continue Latin, Greek, and mathematics throughout the year to the extent of two hours a week each, and to take in the first term history and English, in the second term chemistry and logic. The remainder of the program consisted of two "electives" of two hours each, but the range of election was limited to French and German and additional courses in Latin, Greek, and mathematics. In junior year prescription was reduced to a total of five hours of the required fifteen—physics and psychology in the first term, ethics and political economy in the second—with the remaining ten hours made up of five totally free electives. In senior year the student chose seven electives, which he could scatter at will, unless he was ambitious to achieve "Special Honors" which required that ten of the twenty-four electives of junior and senior years be in one of nine major fields. At the commencement in June 1901 Special Honors were awarded to only nineteen out of a total of 155 bachelors of arts.

The course in "General Science" leading to the degree of bachelor of science followed a similar pattern of prescription and free election, with a reduced requirement in Latin and with required Greek replaced by added requirements in modern languages and the physical sciences.

and by itself made for a greater measure of concentrated effort. Equally significant was a sharp reduction in the number of courses offered by any department with insistence on the principle that each course should deal with a significant and essential segment of the total field of the department. With a few exceptions each department was limited to offering eight or ten upperclass courses: two at junior level, two or three at senior level in each term. The mastery of these courses it was expected would involve a reasonable mastery (at undergraduate level) of the entire field of the department. At the beginning of junior year the student chose a department and in each of his four upperclass terms took three courses in his department or two courses in the department and one course in a subject closely allied to it.

In the year 1905-1906 was inaugurated Woodrow Wilson's most significant educational reform and still the most characteristic feature of a Princeton education: the preceptorial system. Courses in the natural and physical sciences included laboratory sessions in which the student, under the immediate direction of a teacher, took an active part in the process of his own education. In the reading departments however most

upperclass courses had been conducted by lectures, with occasional tests, and in the classroom the role of the student had been that of a more or less attentive listener. A student with an alert and active mind may be more than a passive listener at a lecture, but only outside the lecture room can he check his own reactions against those of his fellow students, and only now and then can he find opportunity to discuss them with the lecturer. A student with less active intelligence can continue undisturbed in a state of merely passive receptivity. The preceptorial system was devised to enlist and stimulate the student's active participation under the immediate guidance of an older student, his preceptor, in the fine adventure of a college education. The number of weekly lectures is reduced from three to two, and the hour thus freed is devoted to a preceptorial group meeting where seven or eight students meet with a faculty member to discuss the week's reading. For some of the many groups into which a large course is divided for this purpose the lecturer himself acts as preceptor; for many of the groups the preceptor is another member of the departmental staff. If so, the opinions which have been expressed by the lecturer may also become matter of discussion. If it happens that on some debatable point the preceptor takes sides against the lecturer, the student learns to his own very considerable intellectual good that doctors disagree, that to many questions there is more than one reputable answer.

The function of the preceptorial conference is well stated in a paragraph printed in the introductory section of recent issues of the Undergraduate Catalogue: "The conferences differ with the character of the subject but are always informal. A conference is not intended to be a quiz or recitation or lecture, nor a method of coaching. So far as the preceptor is concerned, it is a means of discovering and correcting any misconceptions or confusions in the student's mind, and, so far as the student is concerned, a means of stimulation and enlightenment with regard to the study in hand. The reading is discussed with the

student and its scope and implications are extended out of the wider knowledge and maturer scholarship of the preceptor. Study centers upon these conferences, as in the scientific departments it centers upon the laboratory. They are meant not only to stimulate interest in the subject matter of the course, but also to bring students into more intimate contact with their teachers than is possible in the more formal exercises of the classroom."

If an important aspect of the preceptorial system is the enlisting of the student's active participation in the responsibility for his own education, this principle was greatly extended in its application by the very significant revision of the upperclass plan of study instituted in the year 1924-1925 under the leadership of President Hibben and of Luther P. Eisenhart, then Dean of the Faculty, a plan rather inadequately described as the 'Four-course Plan of Study'. By this plan the student's schedule was reduced from five to four formal courses in any term—two of them in his chosen field of departmental concentration, two of them free electives. The time released by this *lightening of his formal schedule the student spends on an individually chosen project of independent study in his field of specialization under the general direction of a member of the faculty assigned to him as his supervisor.* The supervisor helps him in the choice of fruitful topics of study and in their more precise formulation and organization. He criticizes the results of this study as they take form in a written report. The student may consult his supervisor as often as he pleases, but a wise supervisor does not let his pupil forget that the primary responsibility for this independent work is the student's own.

In senior year the independent study is in large measure directed toward the production of a long essay or "thesis" which presents the results of first hand investigation. The abler student has the keen satisfaction of knowing that on the topic he has chosen he has become an authority. Sometimes he is for-

tunate enough to make new discoveries, or to achieve a new synthesis, significant enough to deserve and to attain publication as a book or as a journal article. The less gifted student, though his thesis may be read only by his teachers and by his proud family, has had the joy of creating something that is essentially his own. Over and over students who for three years have been ambitious only to meet the minimum scholastic standards come intellectually of age as they grapple with the challenge of the senior thesis. Here is a short selected list of topics on which senior theses have actually been written:

- The church and liberal society
- The fight for the closed shop
- Nationalism and art
- The application of molecular models to proteins and other structural problems
- The Brandeis nomination fight, a case study in propaganda techniques
- Imago Dei*: the doctrine of man in Dante and Milton
- The theory of fog formation
- An interpretation of the political evolution of Chile and the Chilean Popular Front
- The sex hormones
- Theodore Roosevelt and the rise of the modern navy
- The art and architecture of the Pennsylvania Germans
- Theory of tail spin in aviation
- Anglo Russian relations, 1907-1914
- The Romantic poet as spiritual leader
- Quantum theory of crystal structure *

Besides the duty of writing a thesis the senior has the added responsibility of preparing himself to meet the final hurdle of a comprehensive examination, a series of tests extending over a number of days, which invite him to show his mastery of his

* This list was compiled by Professor Donald A. Stauffer for his booklet entitled *The Idea of a Princeton Education* (page 15)

chosen field of concentration. It is not enough that he has passed a number of courses in the field. He is called on to make a systematic review of these courses, to fill in by his independent reading gaps which his courses have not covered, and to *organize and synthesize his knowledge so that he can answer a series of questions designed to test not only his accumulation of facts but his thoughtful understanding and discriminating appraisal of what he has learned, his appreciation of the relations of various parts of his subject, and his power of expressing his conclusions in a clear and convincing manner*.

The four-course plan of study with its independent study, its individual instruction, and its senior thesis is a program of a type that in most American colleges might be an "honors" program open only to a limited number of especially high stand students who have chosen to embark upon it. But at Princeton it is the curriculum followed by all liberal arts students whose record has been good enough to admit them to the junior year, and a gratifyingly large proportion of those who have previously been content to achieve a respectable mediocrity appreciate the privilege and respond to its challenge. At graduation "honors," high honors," and "highest honors" are awarded to those whose work, as measured by the comprehensive examination and the thesis, has been notably good. In normal years the number attaining to "honors" ranges between thirty five and forty per cent. This distinction is more highly esteemed by the undergraduate body as a whole because there has been no segregation of the more able and ambitious into some special program, and because it is won by taking handsomely a final hurdle. It is a reward for brilliant achievement, not for mere faithfulness to the daily task, a virtue which, however estimable, does not win *high honors in other fields of human endeavor*.

Within the larger framework of Princeton's plan of upper-class study there have developed a number of special programs which provide for concentration not in a single department but in a field to which several departments contribute.

The first of these special programs to be set up was that of the School of Public and International Affairs which is a co-operative enterprise of the Departments of Economics Politics and History Each student chooses as his individual field of concentration on some one broad aspect of domestic or foreign policy toward a more adequate understanding of which he combines courses in these three disciplines and sometimes in still other disciplines which may contribute to his particular problem An important activity of the School is the conference required both in junior and senior year of all students in this program The Conference on Public Affairs follows the procedures of investigation and deliberation which prevail in the world of affairs such procedures as those of an important congressional committee

The Divisional Program in the Humanities is a joint undertaking of the Departments of Classics Modern Languages English Art and Archeology History Philosophy and Religion Its purpose is to introduce the student to the civilization of his own day through a many-sided understanding of the great tradition of western culture which has shaped it

The Program of Study in American Civilization is directed by representatives of the Departments of History English Politics Art and Archeology Economics and Philosophy It is concerned with our American civilization in both its social and cultural aspects and seeks to give to its students an understanding of their own civilization and of the various elements which have contributed to it

The curricular developments at Princeton during the present century have in the upperclass years substituted for the anarchy of free election not a set of required courses but the requirement of an organic program of study leading up to a compelling intellectual challenge with only a minor fraction of the student's time left for the exploration by free election of fields outside his chosen field of major interest But while the upper

class years have been progressively organized, the freshman and sophomore years have increasingly lost the measure of organization involved in the earlier set of required courses. First Greek and then Latin were stricken from the list of prescriptions, to be followed later by philosophy. For the earlier requirement in mathematics the student was permitted to substitute advanced work in a foreign language. In the meantime an ever widening range of subjects was opened to election by underclassmen. So few are the remaining requirements, many of which may be, and usually are, met in school, that freshman and sophomore years are freely elective, except as the student must see that he acquires the tools prerequisite to his upperclass concentration.

It is toward redressing the growing anarchy of uncontrolled election in underclass years that the latest revision of the Princeton curriculum is primarily directed. The new plan of study, adopted in the year 1945-1946 with the expectation that it will become effective with the freshman class entering in September 1947, seeks to give distinctive meaning to each of the four years of the traditional college course and to knit the four years into a single coherent whole, each year closely articulated with the next. In freshman year the student will lay the foundation for his subsequent work, first, by extending his control, begun in secondary school, of essential tools of study, linguistic or mathematical. The amount of such work to be done in college will vary according to the adequacy of his school course. He will, second, extend the boundaries of his intellectual horizon by exploring four essential regions of knowledge. To this end he will be required to take not later than the end of sophomore year two one term courses in each of the following areas:

- 1 The natural or physical sciences, with at least one term of work in the laboratory
- 2 Social studies (other than history)
- 3 Arts and letters
- 4 History, philosophy, religion

In satisfaction of this requirement the student will retain a considerable freedom of choice. He may learn the essential character of scientific study and come to realize what it has contributed to our intellectual life by a year's work in any one of several fields—physics, chemistry, biology, geology, etc. The Princeton faculty believes that this is educationally more profitable than a general "survey" course embracing several different sciences. Similarly he may choose among courses in politics, economics, sociology, social psychology, etc., as the vehicles by which he may attain an intelligent understanding of the complicated social organism in which he is living. According to his tastes and aptitudes he may do work in art, in music, or in literature ancient or modern to the end that he may heighten his perception of beauty, his powers of imagination, his sense of those humane values which have established themselves as the common heritage of civilized humanity. The fourth requirement, that of work in history, philosophy, religion, stands somewhat apart from the other three in motivation. History is concerned with the sum total of human activity in its temporal sequence, with ideas, scientific, political, economic, aesthetic quite as much as with such events as battles and revolutions. Its documents are works of literary art, monuments of art and architecture, as well as charters and chronicles and memoirs. In a more abstracted way philosophy, also, is concerned with all the provinces of thought, and religion—more particularly the Christian religion which is the primary concern of the Princeton Department of Religion—is a guiding and activating principle for the whole of human living and right thinking, embracing our social and economic duty to our neighbor as well as those high and pure aspirations of spirit, those glimpses of the divine Being appropriate to inheritors of the kingdom of heaven. It is expected that the requirement of study in history, philosophy, religion will serve to inculcate in the student the sense of the essential unity of all knowledge, the habit of organizing and systematizing all his intellectual activities.

TEACHERS AND TEACHING

In sophomore year the student, while still concerned with completing these requirements of "distribution," of wide exploration, will begin to focus his studies by concentrating a major fraction of his work in one of the three traditional divisions of the liberal arts—mathematics and the sciences, social studies, the humanities. This program of divisional concentration will in every case involve courses in several of the departments comprised in the division so chosen as to conform to some synthesized pattern. In the humanities, for example, the program may be concerned with the contributions to our civilization made at some important epoch, such as the Renaissance, or the period of the Enlightenment, by philosophy, the plastic arts, music, and literature. This divisional concentration will continue into the junior year, where it will overlap and progressively merge with the work of concentration in a single department (or other restricted field), a feature of the present curriculum which will continue unimpaired in the new plan of study. It will culminate in a divisional examination at the end of junior year, as the departmental concentration culminates in the comprehensive examination at the end of senior year. It will serve as a transitional stage between the general education of the "distribution" courses and the more specialized study of departmental concentration.

The new plan of study will, it is hoped, give direction and meaning to all four of the years of the traditional college course. It will impose no precise prescriptions of specifically required subjects. For each of its requirements there will be a number of options, but the whole pattern of requirement will control about three quarters of the student's work, leaving about one-quarter of his work for uncontrolled free election, or, if the student so chooses, for the sequence of related courses involved in the program of a reserve officers' training corps. The so-called "four-course plan of study," in effect since 1924-1925, has given meaning to the junior and senior years, the new plan

sophomore year In the upperclass years the major portion of the student's work is in the technical subjects appropriate to the particular field of engineering with which he is concerned But the prescribed technical courses are not narrowly technological, nor immediately vocational The emphasis is on fundamental principles rather than on particular applications More than most schools of engineering the John C Green School is concerned to give its students a training that is at the same time technical and liberal

The School of Architecture, founded in 1919 approaches the problems of technical training on principles very similar to those which govern the John C Green School of Engineering Its curriculum is based on the belief that an architect should have a well rounded education in liberal studies, that he should approach his profession primarily as an art, that he should understand and appreciate the other arts in their relation to architecture, and that he should master the science of building-construction as a part of his understanding of architectural design, rather than as an end in itself It operates in close cooperation with the Department of Art and Archeology, from which it is historically an offshoot During his four undergraduate years the future architect conforms to the requirements set for other students in the liberal arts curriculum, with his upperclass concentration devoted to architectural studies, including historical courses in sculpture and painting He is rewarded by the degree of bachelor of arts He receives his more technical training in two years of graduate study leading to the degree of master of fine arts in architecture

The Princeton plan of undergraduate study, which places so heavy an emphasis on independent work and first hand investigation, is peculiarly dependent on the University Library, which shares with the University faculty in the work of teaching During the half century since Princeton assumed the title of

gives a distinctive function to each of the four college years and brings them together into a single coherent whole

The John C Green School of Science, established as a part of the College of New Jersey in 1875, included among its curricula in addition to a general science course leading to the degree of bachelor of science, a course in engineering leading to the degree of civil engineer. A graduate school of electrical engineering was added in 1889. More than thirty years later, in 1921, a curriculum in mechanical engineering and an under graduate curriculum in electrical engineering were established, to be followed a year later by chemical engineering and geological engineering. More recent are the programs in basic engineering (1938), aeronautical engineering (1942), and plastics (1946). These curricula all lead to the degree of bachelor of science in engineering. A fifth year of more advanced technical study is rewarded by the degree of master of science in engineering.

It is a characteristic feature of the School of Engineering on the John C Green Foundation that its courses are conducted in intimate association with the course in liberal arts and sciences. Its students live in the same dormitories, play on the same athletic teams, and dine at the same tables as their fellows who are candidates for the degree of A B. For much of their work they are taught in the same classrooms. The required courses in English, economics, physics, chemistry, geology, and mathematics are courses which are elected also by liberal arts students and are conducted by the teaching staffs of these university departments. And the engineering curricula leave room for a number of electives that may be chosen from the courses given by any of the University's departments of instruction. The first two years indeed are devoted almost wholly to academic subjects, so that a transfer from engineering to liberal arts and *vice versa* can sometimes be made even as late as the beginning of junior year, and is frequently made at the beginning of

(except the areas under the jurisdiction of the police of autonomous entities), carry out those functions as listed in Article 2, Paragraph 2.

Article 28. There shall be established not more than one To or Prefecture headquarters of the National Rural Police within each To and Prefecture at the places where the Governments of To and Prefectures are situated. In Do (Hokkaido) there shall be established not more than 14 headquarters of the National Rural Police in the administrative sub-divisions, one of which shall be at the place where the Government of Do (Hokkaido) is situated.

The area under the jurisdiction of the National Rural Police of To, Do and Prefectures shall be divided into Police Districts, and there shall be established a police station for each Police District.

The area of each Police District and the location, name and jurisdiction of each police station shall be determined by the National Rural Police.

There shall be established police boxes or police sub-stations as lower organizations of police stations.

Article 29. There shall be established branches of the National Rural Police of To, Do and Prefectures at necessary places to have charge of liaison between the National Rural Police of To, Do and Prefectures and the police of autonomous entities and the maintenance and control of the police communication systems under the jurisdiction of the National Rural Police.

gives a distinctive function to each of the four college years and brings them together into a single coherent whole

The John C. Green School of Science, established as a part of the College of New Jersey in 1875, included among its curricula, in addition to a general science course leading to the degree of bachelor of science, a course in engineering leading to the degree of civil engineer. A graduate school of electrical engineering was added in 1889. More than thirty years later, in 1921, a curriculum in mechanical engineering and an undergraduate curriculum in electrical engineering were established, to be followed a year later by chemical engineering and geological engineering. More recent are the programs in basic engineering (1938), aeronautical engineering (1942), and plastics (1946). These curricula all lead to the degree of bachelor of science in engineering. A fifth year of more advanced technical study is rewarded by the degree of master of science in engineering.

It is a characteristic feature of the School of Engineering on the John C. Green Foundation that its courses are conducted in intimate association with the course in liberal arts and sciences. Its students live in the same dormitories, play on the same athletic teams, and dine at the same tables as their fellows who are candidates for the degree of A.B. For much of their work they are taught in the same classrooms. The required courses in English, economics, physics, chemistry, geology, and mathematics are courses which are elected also by liberal arts students and are conducted by the teaching staffs of these university departments. And the engineering curricula leave room for a number of electives that may be chosen from the courses given by any of the University's departments of instruction. The first two years, indeed, are devoted almost wholly to academic subjects, so that a transfer from engineering to liberal arts and *vice versa* can sometimes be made even as late as the beginning of junior year, and is frequently made at the beginning of

sophomore year In the upperclass years the major portion of the student's work is in the technical subjects appropriate to the particular field of engineering with which he is concerned But the prescribed technical courses are not narrowly technological, nor immediately vocational The emphasis is on fundamental principles rather than on particular applications More than most schools of engineering the John C Green School is concerned to give its students a training that is at the same time technical and liberal

The School of Architecture, founded in 1919, approaches the problems of technical training on principles very similar to those which govern the John C Green School of Engineering Its curriculum is based on the belief that an architect should have a well rounded education in liberal studies, that he should approach his profession primarily as an art, that he should understand and appreciate the other arts in their relation to architecture, and that he should master the science of building-construction as a part of his understanding of architectural design, rather than as an end in itself It operates in close cooperation with the Department of Art and Archeology, from which it is historically an offshoot During his four undergraduate years the future architect conforms to the requirements set for other students in the liberal arts curriculum, with his upperclass concentration devoted to architectural studies, including historical courses in sculpture and painting He is rewarded by the degree of bachelor of arts He receives his more technical training in two years of graduate study leading to the degree of master of fine arts in architecture

The Princeton plan of undergraduate study, which places so heavy an emphasis on independent work and first-hand investigation, is peculiarly dependent on the University Library, which shares with the University faculty in the work of teaching During the half century since Princeton assumed the title of

gives a distinctive function to each of the four college years and brings them together into a single coherent whole

The John C. Green School of Science, established as a part of the College of New Jersey in 1875, included among its curricula, in addition to a general science course leading to the degree of bachelor of science, a course in engineering leading to the degree of civil engineer. A graduate school of electrical engineering was added in 1889. More than thirty years later, in 1921, a curriculum in mechanical engineering and an undergraduate curriculum in electrical engineering were established, to be followed a year later by chemical engineering and geological engineering. More recent are the programs in basic engineering (1938), aeronautical engineering (1942), and plastics (1946). These curricula all lead to the degree of bachelor of science in engineering. A fifth year of more advanced technical study is rewarded by the degree of master of science in engineering.

It is a characteristic feature of the School of Engineering on the John C. Green Foundation that its courses are conducted in intimate association with the course in liberal arts and sciences. Its students live in the same dormitories, play on the same athletic teams, and dine at the same tables as their fellows who are candidates for the degree of A. B. For much of their work they are taught in the same classrooms. The required courses in English, economics, physics, chemistry, geology, and mathematics are courses which are elected also by liberal arts students and are conducted by the teaching staffs of these university departments. And the engineering curricula leave room for a number of electives that may be chosen from the courses given by any of the University's departments of instruction. The first two years, indeed, are devoted almost wholly to academic subjects, so that a transfer from engineering to liberal arts and *vice versa* can sometimes be made even as late as the beginning of junior year, and is frequently made at the beginning of

sophomore year In the upperclass years the major portion of the student's work is in the technical subjects appropriate to the particular field of engineering with which he is concerned But the prescribed technical courses are not narrowly technological, nor immediately vocational The emphasis is on fundamental principles rather than on particular applications More than most schools of engineering the John C Green School is concerned to give its students a training that is at the same time technical and liberal

The School of Architecture, founded in 1919 approaches the problems of technical training on principles very similar to those which govern the John C Green School of Engineering Its curriculum is based on the belief that an architect should have a well rounded education in liberal studies, that he should approach his profession primarily as an art, that he should understand and appreciate the other arts in their relation to architecture, and that he should master the science of building-construction as a part of his understanding of architectural design, rather than as an end in itself It operates in close cooperation with the Department of Art and Archeology, from which it is historically an offshoot During his four undergraduate years the future architect conforms to the requirements set for other students in the liberal arts curriculum, with his upperclass concentration devoted to architectural studies, including historical courses in sculpture and painting He is rewarded by the degree of bachelor of arts He receives his more technical training in two years of graduate study leading to the degree of master of fine arts in architecture

The Princeton plan of undergraduate study, which places so heavy an emphasis on independent work and first hand investigation, is peculiarly dependent on the University Library, which shares with the University faculty in the work of teaching During the half-century since Princeton assumed the title of

university, the Library has made a notable advance both in the richness of its collections and in the effectiveness of its service. The number of volumes on its shelves has increased ten-fold—from approximately one hundred thousand to well over a million. Equally striking is the increase in the figures of circulation—the number of times in a given year that books are charged out on loan to readers. During the earlier years of the present century the number was nearly constant at about 25,000. In 1939-1940, the last completely normal year before World War II, the number was 245,423.* These figures obviously do not, and cannot, take into account the number of times that books are consulted within the library building. It has long been the policy of the Princeton Library to grant to all students free access to the stacks so that they may browse at will.

The Harvey S. Firestone Library will be so planned as to make such browsing even more attractive than it can be in the present inadequate and overcrowded building. There will also be provision for conference rooms where students may consult with members of the faculty about their reading. In its new quarters the Library will play an even more significant part in Princeton teaching.

In all matters concerned with the curriculum the University faculty is, in practice, the final authority. Its decisions are, of course, subject to review by the board of trustees, and are regularly reported to the board through the channel of the trustees' committee on the curriculum. But the faculty has never, at any rate within the memory of any of its living members, failed to win for its proposals approval and wholehearted support. The Dean of the Faculty, the Dean of the Graduate School, and the Dean of the School of Engineering, who are sure to be intimately concerned with the shaping of faculty policies, meet regularly with the curriculum committee of the board, and the

*During the period under consideration the number of students has doubled, but the circulation figures have been multiplied by ten.

President of the University, who is at once a trustee and a member of the faculty, is a highly important channel of mutual understanding. Still another link is the standing faculty committee on conference with the board of trustees, which confers four times a year with the curriculum committee of the board. It consists of six faculty members, two of whom are each year elected by the faculty on secret ballot to serve for a term of three years.

The Princeton faculty is a single body composed of all officers of instruction, and is concerned with all phases of the curriculum with graduate as well as undergraduate programs, with engineering as well as with arts and sciences. Like most large legislative bodies, much of its work is done by the agency of standing committees, but the faculty retains, and not infrequently exercises, its power to reverse or substantially modify a committee recommendation.

The committee on the course of study recommends to the faculty approval of new undergraduate courses and programs and is concerned with the shaping of educational policy. It is the function of the committee on examinations and standing to administer the programs which the faculty has established, to determine which students have fulfilled the requirements for a bachelor's degree, which students are scholastically so delinquent that they must be dropped. The committee on the Graduate School exercises both of these functions at the graduate level.

The various departments of instruction have many of the functions of a committee. Each has its chairman, appointed by the President after consultation with the senior members of the department, its own departmental committees, and a "departmental representative" charged with immediate supervision of the department's program of upper class concentration. Each year it nominates one of its members to represent it on the faculty committee on the course of study and one on the faculty committee on the Graduate School. If a new course is offered

to undergraduates for their election in atomic energy, it will have originated in the Department of Physics, where, after having passed the scrutiny of some departmental committee on undergraduate courses, it is voted on in a meeting of the department. The chairman of the department will bring the proposal to the Dean of the Faculty, who will in turn present it to the faculty committee on the course of study. This committee may refer it for further study to its own subcommittee on instruction. If subsequently approved by the committee on the course of study, it is next presented to the faculty for authorization. If it has taken all these hurdles successfully, it can count confidently on further approval by the trustees committee on the curriculum, and on final sanction of the board of trustees. This may seem a complicated procedure, but it has important implications. The course when actually given is no private venture of the professor who may conduct it, it has become the concern of the whole department, and beyond the department, of the whole university faculty.

Equally complicated, and even more vitally significant, is the procedure by which new members of the faculty are originally recruited, and from time to time promoted to higher rank—or allowed to accept an appointment elsewhere. All such actions originate in the department concerned and are voted on in a meeting of the department's senior members, which must agree on a detailed appraisal of the individual's gifts as a teacher and accomplishment as a scholar. There will then usually follow a conference between the chairman of the department and the Dean of the Faculty. From the Dean of the Faculty the recommendation goes next to a small advisory committee elected each year by the faculty on secret ballot, which meets with the President to discuss it. Present at such a meeting are also the Dean of the Faculty, the Dean of the Graduate School, and the Dean of the School of Engineering, and the chairman of the department making the recommendation is called in to explain and, if need be, to defend. The President is under obligation to ask

the advice of this committee. Though he is free to act counter to this advice if his judgment so dictates, it is only on the rarest occasions, and on very special considerations, that he does so. When the proposed appointment has passed these stages, the President recommends it to the curriculum committee of the trustees, which in turn makes its recommendation to the board of trustees in plenary session. This procedure imposes on the recommending department the obligation to see that its proposals are of a sort that will stand the most searching scrutiny, and assures that the President, who must in the last analysis be responsible for the maintenance of a strong faculty, shall have the benefit of competent and disinterested advice.

Both the procedure of appointments and promotions and that by which the curriculum is revised and new courses instituted are time consuming, but there are no questions on which the time of the faculty and the administrative officers of a university could more profitably be spent.

As one looks back over the half-century since the College of New Jersey accomplished its metamorphosis into Princeton University, there is much of which the members of the Princeton family may well be proud. In its libraries and laboratories Princeton's scholar teachers are playing an important part in extending the frontiers of human knowledge, in its graduate school young men are receiving the rigorous training that will fit them to carry on, in Princeton and in other American universities, the fine tradition of teaching and research. On its campus a carefully selected body of undergraduate students is receiving expert and individualized training in the liberal and applied arts and sciences so that they may better play their part as free citizens in the very complex world of the twentieth century. What is already a very good curriculum will be, the Princeton faculty believes, something still better when the new plan of study is inaugurated in the fall of 1947.

The Architecture and the Setting

BY DONALD DREW EGBERT

ARCHITECTURALLY, as well as intellectually, the year 1896, when the College of New Jersey became Princeton University, marks the official beginning of the modern Princeton. For in connection with the Sesquicentennial celebration of that year, the first buildings at Princeton designed in the "collegiate Gothic" or "*Tudor Gothic*," of Oxford and Cambridge—the style that has dominated the architecture of the campus from that day to this—were promised to the University.

Professor Andrew Fleming West, later first Dean of the Graduate School, who more than any other one man was responsible for the success of the Sesquicentennial celebration, was also largely responsible for introducing the collegiate Gothic. As secretary both of the committee in charge of the Sesquicentennial celebration itself and of the committee that secured gifts for Princeton in connection with the celebration, he was in a particularly good position to influence the nature of those gifts. West was enthusiastic about the Gothic of Oxford and Cambridge and communicated his enthusiasm to Moses Taylor Pyne, a wealthy and influential trustee who was likewise a member of the same two Sesquicentennial committees. And because Pyne was also chairman of the trustees' committee on grounds and buildings, through Pyne's influence West was able to gain the support of other members of the board.

As a result, the trustees had designs in a Gothic style prepared for a new library, for several dormitories, and also for a graduate college, a physics laboratory, and a lecture hall, in the hope that friends of Princeton might be induced to present these buildings to the University as Sesquicentennial gifts. Four of the buildings so designed were actually given at that time, and were erected in 1897, while a fifth was presented shortly thereafter.

Moses Taylor Pyne gave two dormitories, Upper and Lower Pyne, on Nassau Street across from the campus, both designed in an English Tudor half timbered style which they helped to make widely popular for domestic architecture in Princeton. He also persuaded his mother to present the Pyne Library (Fig 1), built at his insistence in that masonry version of English Tudor architecture known as collegiate Gothic. Meanwhile, West had induced John Insley Blair, the great railroad magnate who was then a trustee of the University, to present Blair Hall (Fig 2), and this likewise erected in 1897 (though added to later), was the first campus dormitory in the same style. Furthermore, West soon secured the gift of the second collegiate Gothic dormitory at Princeton—Stafford Little Hall (Fig 3), built between 1899 and 1902.

Thus in the four years between the Sesquicentennial and the beginning of the twentieth century, the Tudor Gothic had become firmly established on the Princeton campus and to this day is customarily used for new buildings. However, although the style was not introduced at Princeton until the year when the College became a University, it had nevertheless been foreshadowed in some of the architectural developments made during the presidency of James McCosh (1868-1888), much as the intellectual development of the College of New Jersey into Princeton University had also first been foreshadowed in his administration. For many of the buildings erected under McCosh—such as the Chancellor Green Library, the School of Science (Fig 4), destroyed by fire in 1928, and Witherspoon Hall (Fig 5)—had been designed in Victorian styles which by breaking sharply away from the formal symmetry of the earlier Georgian architecture, helped to pave the way for the collegiate Gothic. Although these Victorian buildings of McCosh's day were mostly inspired not by those of the Tudor period, but by the Ruskinian version of Venetian Gothic then popular in England, nevertheless it was a relatively easy step from the informal picturesqueness of this Ruskinian Gothic architecture to that of the otherwise

very different collegiate Gothic. And once that step had been taken at Princeton for over a quarter of a century the collegiate Gothic was to meet with almost unanimous approval from Princetonians and non Princetonians alike.

Only in the 1920's did much criticism of it begin to arise criticism which continues to the present day and which is usually based on one or more of three different but related points of view—related because they all maintain that the Gothic does *not organically express the function and character of Princeton University as an American university of the twentieth century*. Thus one group of critics has attacked the style primarily from the nationalistic or regionalistic point of view that architectural forms which originated in England are necessarily unsuited to an American university. Others have attacked it primarily from a 'modern' point of view, maintaining that architectural elements derived from a style of the late Middle Ages and early Renaissance *ipso facto* cannot adequately express a university today. And still others have urged that an English Tudor style not only cannot express a modern American university, but from the standpoint of utility is necessarily impractical, uncomfortable, and hence thoroughly unfunctional.

Yet despite all such criticism, for better or for worse the influence of the Tudor Gothic continues at Princeton as the new Dillon Gymnasium (Fig. 6) and the Firestone Library (Fig. 7) indicate. Evidently, then whatever the practical and expressive limitations of the style today, most Princetonians continue to feel that in more or less modified form this kind of architecture is still the best available expression of the ideals of Princeton University, and the best available answer to its needs. In order to understand why this is so, whether one agrees or not, it is necessary on the one hand to investigate the traditions and ideals of Princeton University and on the other it is necessary to investigate the collegiate Gothic at Princeton to see why and to what degree it imitates and differs from the Tudor architecture of Oxford and Cambridge. Only then can one understand

why the Gothic was so gladly adopted at Princeton and why it has persisted for half a century

One obvious reason why the style was adopted, though one which does not account for its persistence, is the fact that by 1896 when Princeton officially became a university the collegiate Gothic was just beginning to be a highly fashionable style in the eastern United States, rivalled only by those various versions of Classic architecture which so many young architects had learned from the Ecole des Beaux Arts in Paris. And one excellent proof of the new fashionableness of the collegiate Gothic is the fact that William A. Potter, architect of the Pyne Library (Fig 1), was persuaded to use the style for that building. For Potter, the brother of a celebrated Episcopal bishop of New York, was one of the most fashionable architects of his day and always adapted himself quickly to changing modes, as his various buildings at Princeton show. Thus, in the early 1870's he designed the School of Science (Fig 4) and the Chancellor Green Library in versions of the then fashionable Ruskinian Gothic. By 1892, however, when he built Alexander Hall, the trend had changed and he now used the "Richardsonian Romanesque," recently popularized by a great American architect, Henry Hobson Richardson. Yet it was only five years later that, at the behest of Moses Taylor Pyne, Potter designed the Pyne Library in collegiate Gothic style.

The Pyne Library and its contemporary, Blair Hall (Fig 2), were not only the first examples of Tudor Gothic architecture on the Princeton campus, but they were among the very early examples in this country. The Tudor Gothic had been revived in England a few years before, primarily for church architecture, as the expression of a consciously archeological movement within the Gothic Revival, a movement seeking to remedy the worst limitations of the earlier Victorian Gothic. One of these limitations had been the manhandling of Gothic details, for the earlier Victorian craftsmanship had often been exceedingly crude. Moreover, elements had been borrowed not only from

the Venetian Gothic but from various other regions and periods of Gothic architecture in a valiant attempt to produce a new style, and had therefore usually been mixed together on a given building with no particular feeling for the original styles—as Witherspoon Hall (Fig 5), built in 1877 from the designs of Potter's partner, R H Robertson, so clearly shows. In addition, the revival of the Tudor Gothic represented a reaction against the earlier Victorian lack of regard for the natural qualities of materials, a lack exemplified by Alexander Hall at Princeton on which soft crumbly brownstone arches hold up heavy granite walls. And while in the 1860s and 1870s the Ruskinian Gothic had been used deliberately for any and all types of buildings, including many (such as railroad stations, factories, etc.) completely unknown to the medieval architect, the Tudor Gothic, on the contrary, has usually been restricted to particular kinds of buildings (such as churches, residential colleges, and country houses) which were also frequent in the late Middle Ages.

The first major example in the United States of this archaeologically more "correct" Gothic is said to have been the chapel of St Paul's School at Concord, N H, built in 1888 from the designs of Henry Vaughan, an imported English architect who later was to design parts of the Episcopal Cathedrals in Washington and New York. However, among the first architects to apply this new kind of Gothic revival to American college dormitories was the Philadelphia firm of Cope and Stewardson, who thereby helped to revolutionize, for a time at least, the design of college buildings in the United States. The earliest designs made by Cope and Stewardson in the collegiate Gothic style were executed at Bryn Mawr College where Professor West of Princeton saw and admired them. The Bryn Mawr buildings were followed almost immediately by others at the University of Pennsylvania and by Blair Hall at Princeton (Fig 2)—the masterpiece of the firm. And shortly thereafter Cope and Stewardson designed Little Hall (1899-1902) at Princeton, as well

as the Gymnasium erected in 1903 but destroyed by fire in 1944 (Fig 3) The Gymnasium was one of the last great buildings designed by the firm, as by the end of 1902 both senior partners had died However, they had succeeded in firmly establishing on the Princeton campus an architectural tradition that has lasted to this day

The next Princeton buildings erected in the same general style were two dormitories, '79 Hall and Patton, both designed by B W Morris Meanwhile another firm was becoming widely known for its work in Gothic style, namely the young firm of Cram, Goodhue and Ferguson, which in 1903 had won a great competition for rebuilding much of the Military Academy at West Point As the Gothic revival was particularly fostered in this country by the Episcopal Church, it is significant that Ralph Adams Cram, originally a Unitarian, had become a fervent Anglo Catholic

In 1907 Cram was appointed supervising architect of Princeton University, an office he was to hold until 1929 As a result, he, more than any other man, was responsible for the character of the buildings erected on the campus during his term of office, and indeed his influence has persisted ever since His own firm designed a considerable number of important buildings at Princeton, including Campbell Hall, completed in 1909 the Graduate College (Fig 8), opened in 1913 McCormick Hall (1922), and the Chapel (Fig 9), dedicated in 1928 And he supervised the work of the architects of many other Princeton buildings Of these other architectural firms the most important was that of Day and Klauder of Philadelphia a firm continued by Klauder himself from the time of his partner's death in 1918 until his own death in 1938 As Klauder had been a draftsman in the office of Cope and Stewardson in the middle '90's when they were executing the designs for Blair Hall his connection with Princeton Gothic lasted for well over forty years Among the works of his firm were Holder and the Dining Halls (Fig 10) completed in 1910 and 1916 respectively, as well as most of the other

recent dormitories including Hamilton (1911), Cuyler (1912), Pyne (1922), Class of 1901 (Fig 11) and Laughlin (1926), Lockhart (1927), Class of 1903 (1929), Walker (1929), and Joline Halls (1932), as well as Eno Hall (1924), the McCosh Infirmary (1925), the Engineering Building (1927), the Frick Chemical Laboratory (Fig 12) built in 1929, and Dickinson (1930) and Fine Halls (1931)

The works of Cope and Stewardson, of Cram, Day and Klauder, and of the other architects who have designed collegiate Gothic buildings at Princeton, all reflect much the same general point of view. The general effect is quite Gothic, with Gothic picturesqueness of composition, Gothic methods of construction, and usually also historically correct Gothic detail. At times whole features are copied almost literally—Holder Tower (Fig 10), for example is a close copy of the crossing tower at Canterbury Cathedral. Yet the primary reason for such copying is not the love of imitation just for the sake of imitation, or of archeology for the sake of archeology, or even fashion for the sake of fashion. As the statements of those who were most responsible for introducing the collegiate Gothic at Princeton show, their primary reason, namely, to express the ideals and function of Princeton in its new status as a university, was a self consciously functionalistic one (although with romantic and 'literary' overtones). Furthermore, since apart from their detail and picturesque massing etc., the collegiate Gothic buildings at Princeton have been designed to meet the specific needs of Princeton as a twentieth century American university, they necessarily are in many fundamental respects far from being historically imitative. And necessarily so, not only because Princeton University, like most other American universities, has grown from a single college (instead of from a group of almost completely independent colleges as at Oxford and Cambridge), but also because Princeton has made its own unique contributions to higher education, contributions demanding architectural expression. Yet it is the non imitative and modern characteristics of

Princeton's architecture which are customarily ignored by those who, usually from lack of knowledge of the actual Tudor Gothic of Oxford and Cambridge, criticize the Princeton buildings as being purely derivative

However, even the more imitative elements, by recalling Oxford and Cambridge, were deliberately adopted in 1896 for the conscious purpose of expressing the fact that Princeton was now no longer just a small and almost sectarian college, but a great university. And because, like Oxford and Cambridge, Princeton is a residential university with its students living on the campus in college buildings and not, as in most Continental universities, scattered in private lodgings throughout a great city, the collegiate Gothic at Princeton is in large part the direct and conscious expression of a distinct philosophy of higher education.

Thus it is certainly significant that Andrew Fleming West—the professor of classics who was so largely responsible for bringing the collegiate Gothic to Princeton, and who later as dean was responsible for erecting the great Graduate College which more closely imitates the spirit and organization of the colleges of Oxford and Cambridge than any other Princeton building—was a great admirer of the educational ideals of the English universities. And he admired them not just because they were English but because he considered them to be closely akin to the ideals of Princeton. Furthermore, unlike many contemporaries, West never sought a German Ph.D. and never succumbed to the German influence then so powerful in American education. Both as a Princeton graduate and as an experienced scholar and teacher, he firmly believed that the residential colleges and universities of the Anglo-Saxon world, which are based on the traditions of Oxford and Cambridge and which have no counterpart in Germany, offer the best possibilities for producing liberally educated men. As he put it in 1903 when describing the future Graduate College which he hoped eventually to see at Princeton: "Whatever may be true of other subjects, liberal studies at least find their greatest charm amid old

associations and their natural home in the peace of rural life. Quadrangles enclosing sunny lawns, towers and gateways opening into quiet retreats, ivy grown walls vistas through avenues of arching elms—these are the answers in architecture and scenic setting to the immemorial longings of academic generations back to the time when universities first began to build their homes. Nothing so deeply appeals to our students today as this type of architecture—the exquisite collegiate Gothic found at its best in the remaining examples of Oxford and Cambridge. Nothing so fully accords in spirit with our desires for Princeton.”

Dean West's future opponent, Woodrow Wilson, had already expressed a closely related point of view. In December 1902, six months after he had been elected president of Princeton, Wilson said in an address to the alumni: “By the very simple device of building our new buildings in the Tudor Gothic style we seem to have added to Princeton the age of Oxford and Cambridge, we have added a thousand years to the history of Princeton by merely putting those lines in our buildings which point every man's imagination to the historic traditions of learning in the English speaking race. We have declared and acknowledged our derivation and lineage and as the imagination of classes yet to be graduated from Princeton [is] affected by the suggestions of that architecture, we shall find the past of this country married with the past of the world.”

But even though Princeton thus turned for architectural inspiration to Oxford and Cambridge in order to express in traditional terms, albeit from a twentieth century point of view, its new purpose as a residential university in the Anglo Saxon tradition, nevertheless the collegiate Gothic at Princeton is in many respects not traditional at all. For, as already suggested, many of its characteristics are the direct, if sometimes unconscious, expression of twentieth century tendencies in architecture. One twentieth century characteristic of the collegiate Gothic at Princeton and elsewhere is the emphasis placed on expressing

of England in which the area of the windows often equalled or surpassed the area of wall

Some of the Princeton Gothic buildings, like those of other American universities, can also be justly criticized as sacrificing good interior design to the Gothic picturesqueness of the exterior. But such lack of coordination between exterior and interior is basically not Gothic. It grows partly out of an over-romantic approach to architecture, and partly out of the fact that the twentieth century architect, unlike the architect of the Middle Ages, too often designs entirely in two dimensions on paper, and hence too often forgets that direct relation of the exterior to the interior which is usually so characteristic of medieval Gothic design.

The most significant differences, however, between the collegiate Gothic buildings of Princeton and their prototypes at Oxford and Cambridge are to be found in plan—that is to say, in the horizontal rather than in the vertical dimension. In contrast to the buildings of the Classic tradition—such as Nassau Hall, for example (Fig. 13)—in which ordered regularity, symmetry, and rigidly axial design customarily dominate the plan, Gothic architecture permits much freer and more organic planning. Consequently, the collegiate Gothic, beneath its more or less archeological dress, can use that freedom to solve the specific needs and express the specific ideals of Princeton University all the more directly because it is unhampered by the formality of Classic design. Indeed, a primary reason why the collegiate Gothic has persisted at Princeton is this same organic and functional freedom which particularly appeals to the modern functional point of view toward architecture,* even though it lacks the romantic appeal to nationalism inherent in that revival of Colonial architecture so popular at many American colleges and universities today.

*For example, so modern an architect as Frank Lloyd Wright has said, 'I have called this feeling for the organic character of form and treatment the Gothic spirit, for it was more completely realized in the forms of that architecture perhaps than any other.'

under James McCosh, the president who first foresaw the rise of Princeton University out of the little College of New Jersey, that there began to develop a much broader point of view regarding the place of freedom and responsibility in a liberal education

Before McCosh came to Princeton, the undergraduates had been kept under the most austere rigid discipline. The younger members of the faculty were not only expected to live in the dormitories but to patrol them regularly as proctors, with the inevitable result that every faculty member was looked upon as the natural enemy of the student. In McCosh's presidency, however, these conditions began to change, for while he said "We have a tutor or officer in every college building, whose office it is to see that those living there conduct themselves properly," he added, "we have abandoned the spy system and our officers do not peep in at windows or through keyholes." And this change in point of view became still more marked after Princeton became a university. As a result, in many respects Princeton began to go well beyond Oxford and Cambridge and beyond most American universities in the degree of social freedom and responsibility accorded the individual. The honor system in examinations, for example, finally adopted in 1893, five years after McCosh retired and just three years before the College of New Jersey became Princeton University, has no real counterpart abroad and is found in very few American colleges and universities.

But it is especially in the plans of the Princeton Gothic dormitories, which in fundamental respects are so different from those of the English colleges, that the greater degree of social freedom given to the Princeton student can be seen most clearly. At Oxford and Cambridge the undergraduate must be in his college by midnight, he is frequently under the eye of resident faculty members and especially of the porter, and the quadrangular plans of the English colleges, each with its supervised entrance, directly express the restraint and supervision thus placed

upon the goings and comings of each student. At Princeton, on the contrary, the Gothic dormitories are not quadrangles (with the exceptions of Holder Hall and the Graduate College, to be discussed later), but meander pleasantly across the open campus (Fig 3). Few faculty members now live in dormitories and those few are never expected to serve as proctors, there are no directly supervised entrances to campus or dormitories, and the numerous separate entries of the dormitories all open directly on the campus so that each undergraduate can come and go as he pleases.

It is true that dormitories with several completely separate entries had been introduced at Princeton—as in West College (Fig 14), built in 1836—for disciplinary reasons. The separate entries served to prevent students from gathering in large and riotous numbers to engage in such favorite pastimes as rolling hot cannonballs down long continuous corridors, pastimes permitted by the original plan of Nassau Hall. Indeed, after a fire burned out Nassau Hall in 1855 new intermediate walls were built across that building, too, in order to prevent such practices.

Yet although the multiple-entry system was introduced on the Princeton campus as an aid to discipline, its further development was largely the result of conscious effort to build in the undergraduate that sense of responsible freedom which had become so important a part of Princeton's ideal of education. This latter point of view was already beginning to be reflected in the dormitories built under President McCosh, notably Reunion and Witherspoon Halls (Fig 5), both erected in the 1870's. But it has been given its most complete expression in the collegiate Gothic dormitories in which, only partly under the influence of English precedent, the individual entries were made still smaller and more numerous (Fig 3), so that they could offer still more privacy and freedom to the undergraduate.

As part, too, of the education of the individual for maturity, it was long the rule at Princeton that each undergraduate was to be responsible for furnishing his own dormitory room and

hence was entirely free to furnish it as he might wish. Only lately has this rule been modified in some dormitories, because of the difficulties encountered by individuals in buying furniture during war time shortages, and also in an effort to reduce the cost. Largely because of the responsibility placed on the students at Princeton in this and other ways, even the worst behaved Princeton undergraduates as any Rhodes scholar will tell you, have rarely approximated the destructiveness of the 'binges' so frequent at Oxford and Cambridge despite much closer supervision.

The development of greater social freedom at Princeton was paralleled by the growth of intellectual freedom and this too has been given architectural expression. Before McCosh's time the rigidly prescribed curriculum was required of all students alike with no allowance for individual tastes and abilities. And it was taught from a relatively narrow point of view by a faculty composed almost exclusively of Presbyterian ministers with no special training in the fields of their teaching. McCosh not only greatly increased the number of able specialists on the faculty, partly by developing graduate studies at Princeton to help train such specialists but he also greatly increased the number of courses offered. Furthermore, McCosh introduced a partly elective curriculum in which some liberty of choice was permitted the individual, and which therefore allowed the student to specialize to a greater degree, though always within a framework of some required subjects for which he was made responsible in order to ensure him a rounded education. For McCosh strongly opposed the free elective system popularized by his contemporary, President Eliot of Harvard maintaining, in public debates with Eliot, that it destroyed the sense of the unity of knowledge while encouraging irresponsibility and lack of mental discipline. Consequently, Princeton never succumbed so completely to the free elective system as did most American universities. And even Harvard itself was eventually to abandon it for a curriculum partly elective, partly required, and based upon



FIG 1. Pyne Library, court





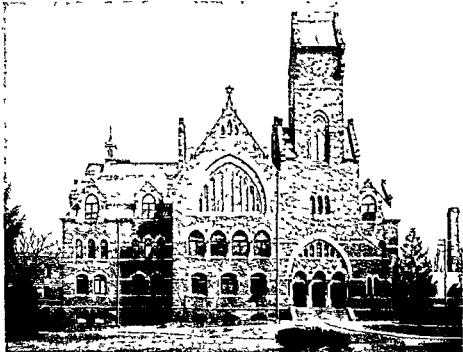
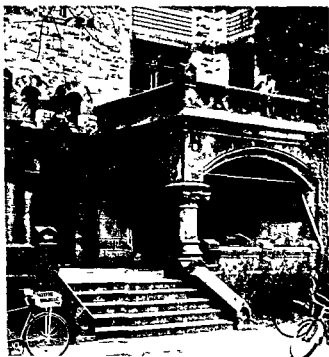


FIG 4 School of Science, destroyed by fire in 1928



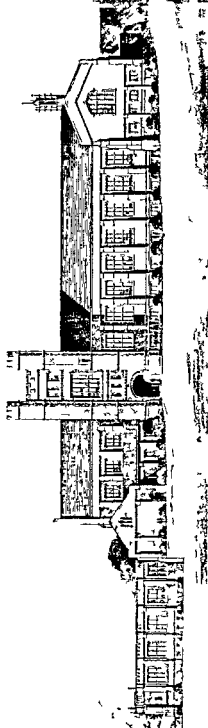


Fig. 6 Dillon Gymnasium project



1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64
65
66
67
68
69
70
71
72
73
74
75
76
77
78
79
80
81
82
83
84
85
86
87
88
89
90
91
92
93
94
95
96
97
98
99
100



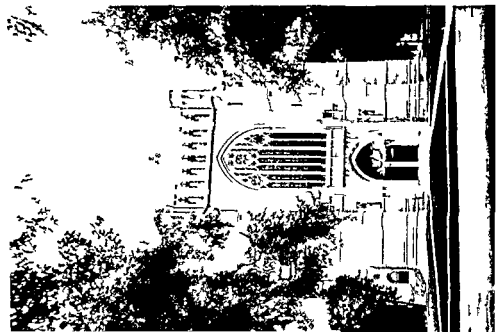
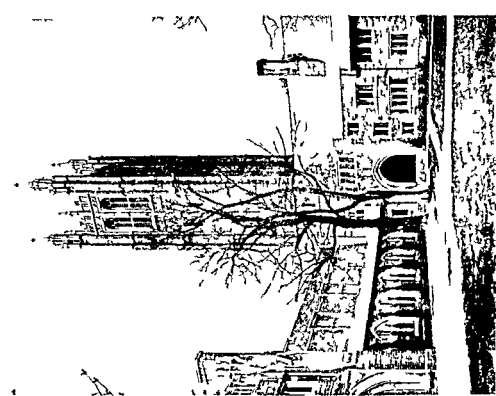




FIG. 11 Class of 1901 Hall



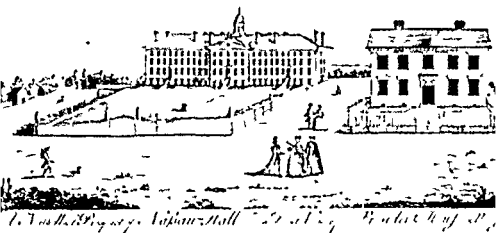
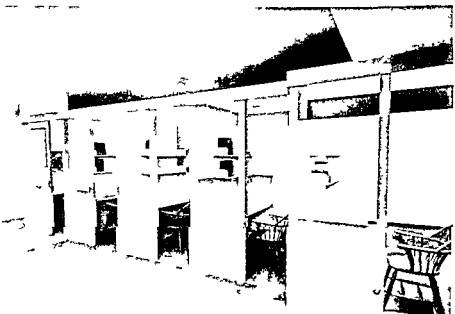


FIG. 13 Nassau Hall in 1764



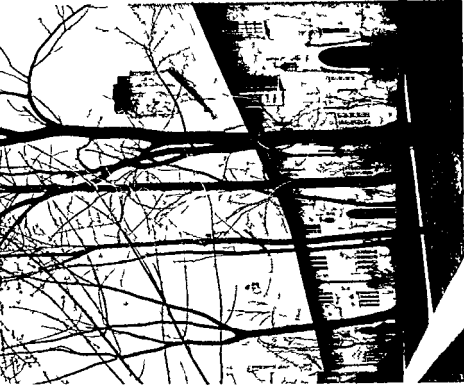


FIG 15 A preceptorial Dickinson Hall



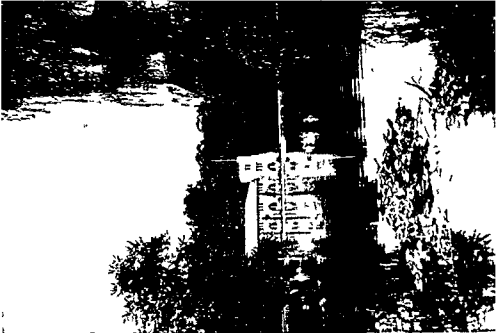


In 17 Henry Tower



In 18 Faculty houses College Road





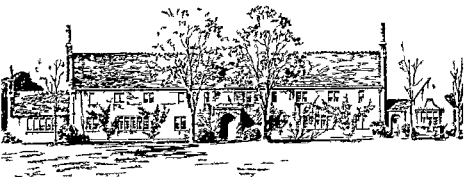


FIG 22 University Center as proposed by President Hibben

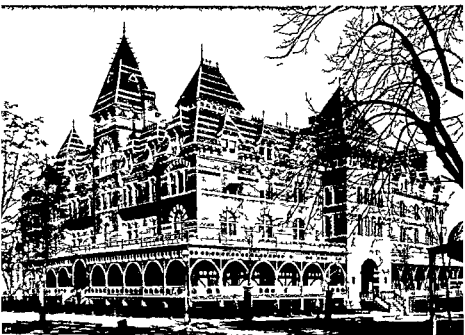


FIG 23 University Hall torn down in 1916



FIG. 24 Madison Hall, interior

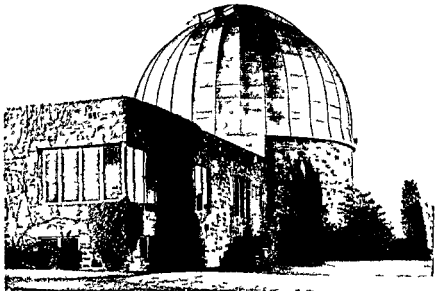


FIG 25 New Observatory



a philosophy of education quite comparable to that of McCosh.

The broader curriculum which thus developed when President McCosh added many new subjects together with specialists to teach them, resulted, as elsewhere, in the erection of many laboratories and other specialized buildings, each devoted to a particular field of study. The first such building at Princeton was the old School of Science (Fig. 4), erected under McCosh in 1873, but most of these specialized structures have been built since Princeton became a university, and particularly since 1902 when Woodrow Wilson was elected president and gave the curriculum a new sense of order by organizing the faculty into formal departments of instruction.

In 1905 Wilson introduced the preceptorial method of teaching—still the pride of Princeton's educational system—which, by means of its small instructional groups ideally limited to half a dozen students, brings the individual into much closer intellectual contact with his instructors and fellow students (Fig. 15). As a result, a higher degree of responsibility is developed for student and teacher alike, a responsibility useful not only for developing the mind but the character as well. Since its introduction, the preceptorial system has necessarily affected the planning of various buildings because the size and shape of new faculty offices and other rooms in which preceptorials are to be held have been determined very largely by the amount of space required for a group of six or seven men. The first building to be erected with some rooms specially designed for preceptorial groups was McCosh Hall (Fig. 20), completed in 1907, two years after the new system went into effect.

The next major step at Princeton intended to develop the intellectual freedom and responsibility of the individual was the introduction of independent study in a specific field of learning, study culminating in the original thesis now required of each Princeton senior. Foreshadowed in the "honors" courses introduced by a few departments for only a few of their students during the presidency of Woodrow Wilson, independent work

toward 'honors' was first required of all upperclassmen in 1923, and since that time the Princeton honors plan has been widely imitated elsewhere. In 1945 the plan of study at Princeton was once more revised to expand still further into underclass years the advantages of independent work, as well as of the preceptorial system.

All these educational developments have been reflected in the architecture in one way or another. Thus, after the final introduction of independent study in 1923, large numbers of individual carrels were built in the stacks of the Pyne Library and of some of the departmental libraries, each carrel being assigned to an upperclassman engaged in preparing, under the personal supervision of a single faculty member, his original thesis on a subject related to the contents of the books on the neighboring shelves. However, the most complete architectural expression of this aspect of Princeton's philosophy of education is to be found in the great new Firestone Library (Fig 7), planned as a 'humanistic laboratory' to house not only books but also those departments which are not already housed in their own special buildings. In the new Library these departments (and also some of the interdepartmental programs of study introduced at Princeton in recent years to cut across the barriers of departmental specialization) will each have the studies of its faculty members, its seminar and conference rooms, and its undergraduate carrels (Fig 16) all grouped together in a single area to bring students and faculty together in close human relationship around the books in their particular field. In the words of President Dodds the Library is to be a campus workshop 'where the three elements of the educational process, students, teachers and books, can be brought together in intimate contact.' And by means of movable partitions the Library will be readily adapted to the future changes that will eventually be necessary as a result of inevitable alterations in the relative size and importance of the different fields of learning.

Hence at Princeton the kind of instruction in large lecture or

class groups (which is still almost the sole method of teaching in most American universities, where the student is so often just a number on an examination book to his teachers) is employed *only for those particular types of subject matter which can best be taught in this way*. Probably more than at any other university lectures have been largely replaced not only by instruction in small preceptorial and conference groups, but also by personal and friendly contact between teachers and students engaged in the common enterprise of learning. And each of these methods for developing the minds of students and faculty alike, has received at Princeton its own special architectural expression.

Furthermore, the architecture of the campus reflects the fact that Princeton philosophy of education includes much more than just the training of the intellect. Like other universities in the Anglo Saxon tradition, and unlike most Continental universities, Princeton has come to accept responsibility for developing not only the mind of the student, but his spiritual and physical life as well for developing, in short, the whole man. Nor is that man now held to be liberally educated unless he has acquired some understanding of the unity of knowledge as well as a particularly thorough grounding in some specific field or fields of learning. And while Princeton believes that only a university can today provide a sufficiently broad curriculum for complete education, it also maintains that a sense of the unity of knowledge can best be achieved only at a university in which the liberal arts college is the focus of the institution, and is not lost in a welter of miscellaneous and highly specialized graduate schools.

While, as already noted, this Princeton philosophy of education stems chiefly from the Anglo Saxon tradition of higher learning, it is actually a synthesis of several ideals and traditions, a synthesis in part characteristic of many American universities but in part unique. In origin it can be described as a philosophy in which the medieval education of the clerk, for which universities were originally founded, has been combined with the Renaissance and humanistic ideal of the universal gentleman, trained

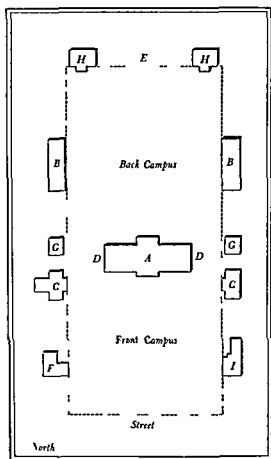
in body as well as in mind for leadership, an ideal that produced the English college within the university and almost in opposition to it. Then, partly out of the medieval tradition but reshaped in the dissenting academies of England came that austere Calvinistic belief in the need for an educated clergy which was so prominent at Princeton until the latter part of the nineteenth century. In addition, out of the aristocratic Renaissance ideal of the gentleman educated for leadership grew the related but more democratic ideal of the well rounded citizen trained to accept responsibility in his community—an ideal first strongly impressed on American thought by one of Princeton's greatest presidents John Witherspoon, and reemphasized with new force by another great president, Woodrow Wilson. At Princeton, too, the English tradition of the residential university as the most effective setting for a liberal education has been greatly reinforced by that peculiarly American and romantic belief stemming especially from Thomas Jefferson that the country, not the city, is the best place for educating the future citizens and leaders of a republic.

As a result of this last mentioned belief, ever since the Calvinistic austerity which had dominated Princeton for so long began to wane in the second half of the nineteenth century, more and more emphasis has been placed on the beauty of the natural setting of the *Princeton campus* as an *important element in the liberal education of Princetonians*—an emphasis reflected in Dean West's statement already cited, that "liberal studies find their natural home in the peace of rural life." And in connection with this point of view every effort has been made since McCosh's time to increase the natural beauty of the campus at Princeton—a development all the more necessary as the town and its surroundings have gradually become less countrified.

In the eighteenth century—as may be seen in the well known engraving of 1764 (Fig. 13)—there were no trees to speak of around the College, and Nassau Hall, standing baldly on its

THE ARCHITECTURE

gentle eminence, was visible for miles around. While elms were first planted on the front campus during the presidency of James Carnahan (1823-54), it was under President McCosh that the

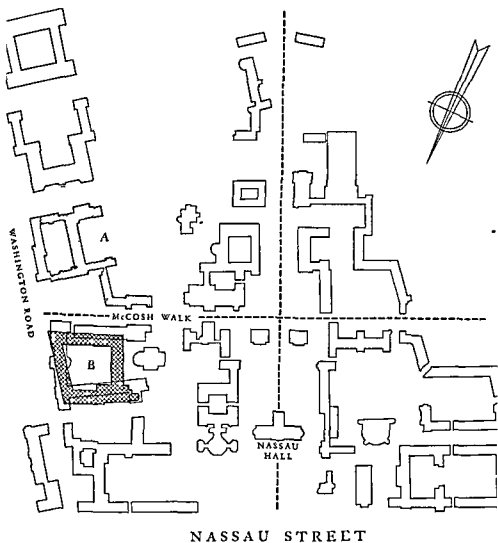


PLAN 1

real shift was made away from the austere Classic symmetry and formality so well illustrated by the plan for the campus drawn by Joseph Henry in 1836 (Plan 1) in connection with the campaign to raise money for the original Whig Hall. It was McCosh who was largely responsible for adopting the present

park like "English-garden" type of landscaping at Princeton, a type which had originated in England as an expression of the romantic return to nature. In 1869 McCosh suggested to the trustees that a landscape gardener be engaged "to furnish a plan for the improvement of the College." And in his spare time McCosh himself loved to design new paths and to select the sites for new buildings, laying out the campus, as he said, "somewhat on the model of the demesnes of English gentlemen." The picturesquely informal landscaping which resulted (Figs 17 and 20) has doubtless helped to encourage the adoption of that picturesquely informal kind of collegiate Gothic architecture which fits so well into such a setting. And without stressing the parallel too strongly, it is worth noting that the shift from a rigidly fixed and axial campus plan to the present free and informal layout, was contemporary with the first shift—also made under McCosh's guidance—from the rigidly fixed curriculum of a small Calvinistic college to that of a future university in which a considerable amount of freedom of choice was left to the individual. In short, the same general point of view gave rise to both developments.

But the informal layout of the campus since McCosh's time has certainly not meant that planning has ever been entirely abandoned. It is true that for a long time such planning was mainly by amateurs, including McCosh himself, and was by no means always completely successful. In 1907, however, during Woodrow Wilson's presidency, Ralph Adams Cram was appointed to be the first supervising architect of the University, and soon produced the first really long-range plan for the development of the campus (Plan 2). Thus, just as the curriculum, while still permitting considerable freedom of choice to the individual student, was reorganized under Wilson in accord with a new and far seeing plan for the future, so also was the campus itself. For as Cram said in a talk to the alumni in 1908: "One of the most essential elements in all education is that the students should feel themselves surrounded by definite law, from which there is, however, a way out into the broadest



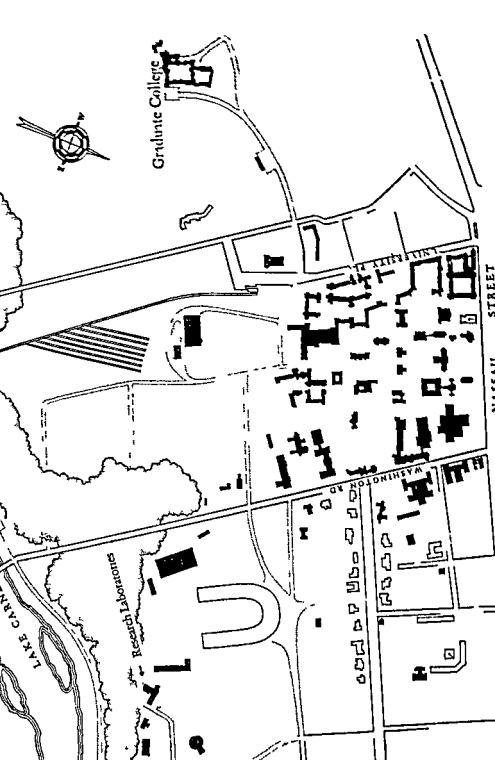
A Wilson's proposal for Graduate College
 B Earlier plan for Graduate Co

PLAN 2

and highest freedom This must absolutely be shown in the material form of the University " But in his zeal for giving material expression to organization and law, Cram went too far when he included a new and rigid major axis running straight back from the center of Nassau Hall between Whig and Chio along great monumental staircases and other highly formal elements, an axis which would largely have destroyed the easy informality and natural charm of the campus Princetonians, with a better, if partly unconscious, sense of the kind of setting best suited to the ideals of the University and to its collegiate Gothic architecture, rejected this particular feature, even though in other important respects the influence of Cram's plan upon the physical development of the University has been great (Plan 3)

But although Princetonians thus believe that beautiful architecture in a lovely natural setting is an important element in the process of liberal education, it must be admitted that this point of view has been applied more to the quarters of the students than to the living quarters of the faculty Indeed, one noted French scholar, Gabriel Millet, on his first visit to Princeton, pointed to Henry Hall (Fig 17) and the other neighboring dormitories as he walked up from the railroad station with a Princeton friend, and asked "These Gothic palaces—what are they?" "That's where the students live," replied his friend At that point the Frenchman's eyes moved to the row of faculty houses across the street (Fig 18), cramped on its relatively narrow lot, "And what are those simple dwellings?" "Why, that's where members of the faculty live," replied his friend The Frenchman rolled his eyes and shook his head slowly in amazement "*Quelle chose curieuse!*" said he

But although these houses, like most of the faculty houses at Princeton, have been very cheaply constructed, the architects have managed to achieve surprisingly effective and charming results in spite of the severe limitations imposed upon them Moreover, it can be said with truth that much more has been done for housing the faculty at Princeton than at either Yale or Har-



vard, probably because of sheer necessity as the growth of the faculty has at times outstripped the number of houses available in the small town that Princeton still is. The first large faculty housing development was not, however, built by the University itself but was the gift of a generous friend. For when the housing situation became acute after Woodrow Wilson added some fifty "preceptor guys" in 1905, Moses Taylor Pyne formed a company to develop the Broadmead section of Princeton in which, beginning in 1907, a considerable number of single houses were built for the faculty, and at his death in 1921 Pyne bequeathed these to the University. As the faculty gradually grew still larger, more housing became necessary with the result that in 1921 the row of faculty houses mentioned above was erected on College Road near the railroad station, while in 1925 another row was built on Prospect Avenue. And in 1946 the University set forth a proposal to raise, as part of its third century fund, no less than \$2,000,000 for additional faculty housing, now more than ever before considered a major factor in Princeton's future as an educational institution.

To many non-Princetonians who are accustomed to urban universities with departments and graduate schools either scattered widely throughout a city, or jammed together in high buildings on a narrow campus behind a forbidding wall, the pleasant, open, and semi-rural aspect of Princeton's architecture has led them to assume, mistakenly enough (and often with some envy), that Princeton University is nothing but a glorified country club. And this assumption has no doubt been further encouraged by the great playing fields (Fig. 19) and the numerous outdoor sports at Princeton, where—as part of the education of the whole man—that training of body and character encouraged by participation in team sports is considered to be nearly as important as the training of the mind.

Physical education at Princeton really began when the austere and narrow theological point of view which dominated the Col-

THE ARCHITECTURE

lege at the beginning of the nineteenth century was gradually overthrown by the more liberal point of view introduced by James McCosh, himself a Presbyterian minister. It was in his inaugural address that McCosh first called for the introduction of physical training as a regular part of the curriculum, stating that "every college should have a gymnasium for the body as well as for the mind." As a result of his plea the Bonner Marquand Gymnasium was immediately presented to the College, built at a cost of \$32,000 about where Campbell Hall now stands, and opened for use in 1870. This gymnasium—primitive enough from present day standards, particularly in its lack of ventilation—was considered one of the best of its time and an important addition to the College. The only previous gymnasium had been a simple wooden shack, erected behind West College in 1859 with the munificent sum of \$984 subscribed by students and faculty, but this was intentionally destroyed six years later after a tramp suffering from smallpox had slept there. The Bonner-Marquand Gymnasium was the first college building at Princeton to be designed with even primitive bathing facilities, which in this instance consisted chiefly of two tin tubs. Its director, George Goldie, whom McCosh called "the most accomplished gymnast in America," and who was one of the first teachers of physical training at any American college, was still in charge of physical education at Princeton when, in 1903, a great new gymnasium (Fig 3)—destroyed by fire in 1944—was erected on the site now occupied by the Dillon Gymnasium.

Meanwhile, interest in outdoor sports steadily increased and many playing fields for these sports were developed, most of them after Princeton became a university in 1896. The quad range behind Nassau Hall and, later, a hilly field southwest of Chlo Hall had long been the only playing grounds. Then the town field at the foot of Chambers Street was used for baseball until 1876 when University Field was acquired by the University Hotel Company. The company used part of the land for a vegetable garden and rented the rest to the Baseball Association for

a nominal fee until 1888 when the field was transferred to the trustees of the College. A track was early laid out there and for many years University Field was also used for varsity football games before the Palmer Stadium was built in 1914.

In 1895 the Princeton Golf Club was founded by friends of the College, and when, about 1900, the present eighteen hole course was laid out, it was considered the finest college course in the country. As the campus expanded to the south, other playing fields were developed as part of the campus itself, the first being Brokaw Field, given by alumni in 1893 "for the benefit of undergraduates who are not members of university teams." However, most of the playing fields at the southern end of the campus have been laid out since Princeton became a University, and particularly since 1914 when Goldie Field was first opened.

Many other athletic facilities were developed for both intramural and intercollegiate athletics. Although a tennis club was founded in 1882, it used the courts of the town club at the foot of Chambers Street until the first formal courts on the campus were laid out back of Brown Hall in 1895. In 1906 the Millstone River was dammed at the expense of Andrew Carnegie to form Carnegie Lake (Fig. 21), which has added so greatly to the beauty of Princeton. And the lake finally made it possible for Princeton to engage regularly in intercollegiate rowing, after a previous valiant attempt in the '70's, when the present canoe house was built on the canal bank as a boathouse, had petered out because of the inadequacy of the canal for training purposes. It is significant that Woodrow Wilson was not satisfied with Carnegie's gift, for during his presidency he especially emphasized the intellectual needs of the University (and thereby eventually aroused the opposition of many alumni who felt, rightly or wrongly, that he did so at the expense of the Princeton tradition of the well-rounded man). Hence, when on a later occasion Wilson pressed Andrew Carnegie to contribute to the endowment of the University, and Carnegie said, "But I have already given a lake to Princeton," Wilson is said to have retorted, "We

needed bread and you gave us cake" In the light of Wilson's retort it is not surprising to find that, during his administration no intercollegiate races were allowed on the Lake Nor were any of the major structures for specialized sports or other extra curricular activities at Princeton erected during his presidency The Brokaw swimming pool was opened in 1896 in the administration of his predecessor, President Patton, while the Class of 1887 Boathouse (Fig 21) built in 1913, the Palmer Stadium (1914), the Baker Rink (1923), and the McCarter Theatre (1929) were all erected under his successor, John Grier Hibben

However, it was Wilson who particularly reemphasized the Princeton tradition, first firmly established in the eighteenth century by President Witherspoon, that a major aim of Princeton education is to produce individuals trained to take their responsible place as citizens in a democratic society As part of their education, therefore, each undergraduate and graduate student at Princeton has long been expected to take a responsible and loyal place within the closely knit student body To foster such solidarity Princeton has always been limited to men only, and is proud of the fact that, unlike Yale and Harvard, it is one of the relatively few American universities which have never succumbed in any way to coeducation, believing that adequate social contact with the other sex is best achieved as an extracurricular activity Moreover, since 1922 the enrollment has been limited so that "Princeton spirit" and "class spirit" can be more easily maintained, not just as ends in themselves, but as elements contributing to a compact student community and hence to the education of the well rounded individual as a member of that community

It was primarily on this account that Woodrow Wilson's "quad plan," proposed in 1907, was so bitterly and successfully opposed by many alumni, for they felt that the division of the undergraduate body into "quads" (or complete residential quadangles each directly modelled on the English colleges of Ox-

ford and Cambridge) was an artificial division when imposed on a compact American college, and one which would inevitably tend to destroy both class spirit and Princeton spirit and thereby to disintegrate the social solidarity of the student body. Although Wilson himself had proposed the plan primarily as a device for improving the intellectual life of the campus, he increasingly came to believe that it was necessary also for preserving the democratic unity of the undergraduate body which he felt was being destroyed by the increasing number and importance of the upperclass eating clubs. Said he, "The only way in which the social life of the undergraduate can be prevented from fatally disordering and perhaps even strangling the academic life of the university is by the actual absorption of the social life into the academic." To which his opponents retorted that he was not only destroying the very social solidarity he sought to preserve, but was also interfering with the liberty of each student to choose his own friends and thereby attacking the Princeton tradition of the freedom of the individual. Thus, paradoxically enough, the arguments of both sides in the dispute were based on much the same Princeton traditions.

The opposition proved to be so strong that the quad plan was soon shelved, although its influence is to some degree reflected in the quadrangular plan of Holder Hall (Fig. 10), which was completed in 1910 and which more closely imitates the spirit of an English college than any other Princeton dormitory. However, the chief influence of the quad plan was to be felt over twenty years later, not at Princeton but in the "houses" of Harvard and in the "colleges" of Yale. For some solution of this kind had become imperative at both Cambridge and New Haven to give at least a partial coherence to undergraduate life which was being swallowed up not only by the two surrounding cities but by the ever-increasing number of specialized graduate schools.

One of Wilson's best friends on the faculty at Princeton, John Grier Hibben, had strongly opposed the quad plan because he felt that it involved too fundamental a change and might un-

favorably affect the traditional solidarity of the student body at Princeton. But he had heartily approved when, early in 1906, Wilson had established for the freshman eating-clubs a commons in University Hall (Fig. 23), the former somewhat ramshackle hotel and dormitory which then stood on the corner of Nassau Street and University Place. And when, two years later, after the quad plan had failed of adoption, a sophomore commons was also organized, Hibben approved again. However, University Hall was obviously inadequate and in February 1912, one month after he had been elected to succeed Wilson as president, Hibben strongly emphasized in an address to the alumni the need for a new group of dining halls, plans for which had first been published in the *Alumni Weekly* during the preceding June. Said Hibben: "It is because of the possibility which our seclusion affords of developing the intimate relations and associations of our campus life where the undergraduates in daily intercourse have a common round of duties and of pleasures that we have been able to develop an ideal democratic community." To preserve this democratic spirit he called for a "University Club or Commons Hall, I do not care what name you give to it, so long as it serves the purpose of a central home for our university family." Through his efforts the last necessary funds were raised, and Madison Hall, as the great group of dining halls is known, was completed in 1917 (Fig. 24), and there all underclassmen still take their meals. Most of those upperclassmen who did not join clubs also ate in the dining halls until, in 1936, the University took over the Gateway Club for their benefit.

After the Marquand Chapel, built in 1881, burned in the spring of 1920, it was President Hibben who was primarily responsible for securing the great new Chapel (Fig. 9), second in size only to that of King's College at Cambridge. Hibben, like all of his predecessors except Woodrow Wilson, was an ordained minister. To him the new Chapel was an important symbol of the religious spirit which from the beginning had been

considered a necessary factor in liberal education at Princeton. Furthermore, the Chapel at Princeton (a college and university always non-sectarian by charter, even though long under the patronage and influence of the Presbyterian Church) has ever symbolized that unity of the student body which transcends religious differences, for the Chapel has long been the one place where the students as a group have regularly gathered together. And while, as President Hibben wished, the requirements for Chapel attendance were made less strict than ever before, nevertheless, to him it was the most important symbol of unity at Princeton.

Toward the end of his term of office President Hibben came to believe that a 'university center" (Fig. 22) in addition to the Chapel and dining halls, a center open to all members of the university community alike, was necessary as a further focus for the social life of the campus and as a remedy for possible undemocratic tendencies in the upperclass clubs. Although his last report to the board of trustees called this one of the two chief needs of the University—the other being a new library—Hibben's university center was never built. Nevertheless, during the Second World War when the dining halls were completely occupied by servicemen, Dodge Hall, erected in 1900 to house the social service activities on the campus, was made into a center for undergraduates, and has since continued to be used in that capacity. Thus the dining halls, the University Gateway Club, and the campus center in Dodge Hall have been the answers actually made at Princeton to the problems which Woodrow Wilson had sought to answer by means of the quad plan.

Wilson's quad plan had probably drawn its inspiration not only directly from the colleges of Oxford and Cambridge as suggested above, but also from the original plans for the proposed new Graduate College which likewise were based on English precedent. These original plans were prepared for the trustees by the firm of Cope and Stewardson in connection with the

Sesquicentennial celebration, and with the strong approval of Professor Andrew F. West. During the celebration ceremonies President Patton had stressed the great need for the Graduate College, which then was to form a quadrangle located north of McCosh Walk on and beyond the site now occupied by McCosh Hall (see B, Plan 2). During the following year the designs were published in the book entitled, *Plans and Sketches of the New Buildings Erected or Proposed for Princeton University*, a book prepared largely under West's guidance. The statement accompanying the plans said, "There is today no projected institution or foundation of so much importance to Princeton as the Graduate College. It has been made the subject of a special memorial addressed to the trustees by the faculty of the University, and has been adopted by the trustees as the project of the highest importance for Princeton's university development." The proposed building was to be in the collegiate Gothic style because "the consideration that Princeton is not a city but a quiet old academic town had weight, and for this no style presented so many advantages as the historic collegiate Gothic of Oxford and Cambridge."

In 1900 West was made dean of the Graduate School and renewed the campaign to secure a Graduate College. Because he believed that a residential college with at least some resident masters as in an English college, offered the best means for developing real scholars, he wrote in 1903 "A necessary condition for the production of accomplished scholars is constant contact of an intimate personal nature with professors of marked ability, sympathy and efficiency." And he stressed the necessity for taking care "that the character of the faculty will be such that the true Princeton tradition will be perpetuated with as much purity and strength as has been attained even in the old universities of Oxford and Cambridge."

With statements such as these, which carried further the traditional Princeton philosophy of education Woodrow Wilson was in hearty agreement. In 1902, when Wilson delivered his

inaugural address as president of the University, he, too, had called for this new Graduate College. And he emphasized the fact that it was to be located at "the very heart, the geographical heart of the University," for he believed that, as at Oxford and Cambridge, the undergraduates would be inspired to greater intellectual effort by the presence of more advanced and mature students in their midst.

However, Wilson's interest shifted to the development of the preceptorial method of instruction, with the result that in 1905 it was decided to build McCosh Hall, designed in part to house the preceptorial system, on the site formerly set aside for the Graduate College. As time passed, Dean West became convinced that Wilson was intentionally delaying the project for the Graduate College, and after Wilson proposed the quad plan, a bitter dispute arose between the two men and their respective adherents. West now insisted on a site away from the main campus, partly, no doubt, out of a desire to be as independent of Wilson as possible. But he also undoubtedly had come to feel that a Graduate College designed as a completely separate and compact quadrangle was highly necessary in order to help give that sense of intellectual and social solidarity—so important an element in a Princeton education—to a body of graduate students who were gathered from many very different institutions and who were specializing in a wide variety of fields. For without such solidarity West believed that, as at most other universities, the graduate students would tend to become narrow and isolated specialists unable to profit by a liberal education.

After a long and complicated dispute in which many sites for the proposed College were discussed, Wilson's final choice was the area between '79 Hall and "Prospect," across McCosh Walk from the site originally proposed (see A, Plan 2). Meanwhile West's choice and that of his friend, Grover Cleveland, chairman of the trustees' committee on the Graduate School, shifted from "Merwick" (a former private estate on Bayard Lane where a provisional Graduate College had been installed

since 1905) to the site on the golf links where the Graduate College stands today (Plan 3) In 1910, just as Wilson seemed to have won, Isaac Wyman, Class of 1848, died leaving to the Graduate School a sum thought—mistakenly—to be at least \$2 000,000, with West as an executor of the will Wilson gave up and a few months later resigned to run for governor of New Jersey The Graduate College, built overlooking the golf course in accordance with West's specifications, was opened in 1913 with the Cleveland Memorial Tower, President Cleveland's national memorial, as part of the design (Fig 8) It was the first residential college in America devoted solely to the higher liberal studies

But although Wilson and West had disagreed on the location of the Graduate College, it is too often forgotten that in certain major respects they were in agreement as to what the nature of a university should be Both of them believed in emphasizing the unity of knowledge, and believed in the liberal arts as the focus on which such unity must center Consequently, for them both the best architectural expression of a university involved a single compact campus for the liberal arts college and a single compact residential graduate college devoted to the arts and sciences an ideal sharply different from that of so many sprawling American and Continental universities whose frequently uncoordinated schools, departments, and campuses are often scattered through a large city, and whose students in many cases commute daily from widely scattered homes and thereby lose the advantages of close association with university life Furthermore, as already indicated, both Wilson and West felt that a single architectural style was necessary to express this unity, and chose the collegiate Gothic as best expressing Princeton's belief in the Anglo Saxon tradition of the residential university

Today, the majority of Princetonians continue to believe that, in order to express such unity, new buildings on the campus should harmonize with those already erected in the collegiate

Gothic style, even though there is wide difference of opinion as to the degree to which this harmony should be based on traditional forms. In any case, however, this desire for harmony of style among buildings erected a considerable number of years apart—a desire that at Princeton has resulted in the persistence of the collegiate Gothic for half a century—is not due to archeological and hence imitative intent. For it was usually lacking in the Gothic of the Middle Ages in which even the parts of a single building if constructed at different times, were customarily different in style as the two dissimilar spires of Chartres Cathedral so clearly show. At Princeton, moreover, this harmony tends to be restricted to the architecture of the campus buildings erected off campus, and particularly those for primarily "utilitarian" purposes such as the New Observatory (1934) (Fig 25) and also the various war time and post-war laboratories down by the Lake (Fig 26) are mostly much less traditional in spirit.

Somewhat similarly, the architecture of the upperclass clubs, also off campus, shows a wide range of architectural style which to some degree reflects their social diversity. And while, as Woodrow Wilson felt, social diversity can be dangerous to the unity of the University if uncontrolled (and the degree of control is still a subject of prolonged debate), nevertheless most Princetonians believe that at least some such diversity is important for encouraging the sense of responsible freedom which Princeton seeks to develop in her sons.

This difficult balance between unity and variety of outlook—a balance so rare in American universities and yet so necessary for a liberal education—is particularly fostered by the geographical location of Princeton. On the one hand unity is encouraged by the fact that the University is itself unusually compact and is located in a small town, one of the most beautiful and historic towns in the United States. On the other hand, narrowness of outlook is discouraged by the fact that Princeton is only an hour by rail from two of the world's largest cities. That this combina-

THE ARCHITECTURE

tion possesses immense educational advantages is indicated by the large number of educational or semi educational institutions which have moved to Princeton in recent years and which without interfering with the unity of the University, have thereby added to the range of cultural advantages contained within the *town of Princeton itself*

Thus Princeton University, by its location, by its traditions and particularly by the course of its development since President McCosh first envisaged the College as a University, offers special advantages for a liberal education, an education designed to produce well rounded individuals trained not only in mind but in body and spirit as well. It is significant that all these three major aspects of a Princeton education have not only been expressed in the architecture of the University during the last fifty years, but that they are especially well summed up in the last three large buildings erected or being erected on the campus. The fact that the life of the spirit is considered important at Princeton is symbolized by the soaring Chapel (Fig 9), dedicated in 1928. Similarly, the emphasis given at Princeton to the well trained body as an important aspect of the well educated man is symbolized by the new Dillon Gymnasium (Fig 6). And now the new Firestone Library (Figs 7 and 16), conceived as a humanistic laboratory, directly reflects Princeton's own unique kind of liberal education for the intellect. In short, the two hundredth anniversary of its birth finds Princeton University carrying further than ever before its tradition, first established during the eighteenth century, of educating individual Americans not only for the nation's service, as Woodrow Wilson expressed it but for free yet responsible membership in society as a whole.

The Trustees

BY WALTER E HOPE

IN the preparation of this chapter, the writer has become increasingly conscious of the need for a preliminary note of explanation, not for Princetonians but for others who may be sufficiently interested to read this volume. It must be confessed at once that among the members of our family we number a certain proportion of fanatics—others might use a stronger term. The success of our undertakings is dependent in large measure upon the extraordinary zeal, enthusiasm and devotion of our members. Therein lies the key to questions such as "Why does Princeton have so large a board of trustees? Does it not prove unwieldy and involve the carrying of dead wood?" "Why is the board made up so overwhelmingly of Princeton graduates?" Princeton boasts no monopoly of this invaluable quality. Like other institutions similarly favored, it is gratefully appreciative and endeavors to realize upon it to the fullest extent. A knowledge of this important factor is essential to any understanding of our operations and the degree of their success.

The official and corporate title of the University is 'The Trustees of Princeton University'

This title had its origin in the original Charter of 1746 (then, and until 1896, "The Trustees of the College of New Jersey"). This charter conferred broad powers upon the trustees for the conduct of the college. These powers continue with little change until the present day, although in many instances their observance has been wisely adjusted to changed conditions, much as the provisions of the Constitution of the United States have been adjusted by interpretation on the part of the Supreme Court.

The history of the early years shows that the trustees took a direct and active part in the conduct of the college and its in-

ternal affairs, even to the extent of the expulsion of students and other administrative details. This is perhaps not surprising, inasmuch as at the beginning the number of trustees exceeded that of the faculty, or, for that matter, that of the students. It is of interest to note the intense zeal and personal interest of the trustees in the affairs of the College from the outset, a quality which has been perhaps the outstanding characteristic of their successors over the past two hundred years.

The number and method of election of the board of trustees have been changed from time to time. At present, the board consists of thirty-five members. Of this number the Governor of New Jersey and the President of the University are members *ex officio*. There are twenty-five Charter Members who are elected by the board to serve for life. The remaining eight are Alumni Trustees who are elected by the alumni, and serve each for terms of four years.

Under the provisions of the charter at least eight members must be residents of New Jersey.

Perhaps the most important and significant change in the membership of the board came about with establishment of the plan for Alumni Trustees. During the early years of this century, as a result of a marked increase in the number of living alumni and a corresponding increase in the intensity of their interest in the affairs of the University, a widespread feeling arose that it would be desirable to have a certain proportion of the board chosen by direct vote of the alumni. A further reason was the desirability of direct regional representation covering the entire country. Accordingly, after careful consideration, a plan was devised and the charter amended to provide for the election of five Alumni Trustees. Some years later the plan was further revised in the light of subsequent experience and the number of Alumni Trustees was increased to eight. At present, two Alumni Trustees are elected each year by ballot of the alumni, each to serve four years. Of this number, one is elected at large, by ballot of all living alumni. The other is elected by the

ballots solely of alumni living in one of four Regional Districts. Upon the expiration of his four year term, no Alumni Trustee may be reelected until after the expiration of one year, thereby ensuring rotation in office.

The system of Alumni Trustees has presented many advantages. It provides direct representation for the alumni and it also ensures continuous representation of every region in the country. In practice it also develops material for subsequent consideration in the election of Charter Members, as it offers opportunity over a four year period to measure the ability, interest and availability of prospective candidates. A substantial number of the present Charter Trustees were previously elected by the alumni, or were candidates for election as Alumni Trustees.

The most recent changes in the provisions governing membership on the board came about in 1942, as the result of the deliberations of a Committee on Reorganization which was appointed to review the entire subject. Its report laid particular emphasis upon the desirability of rotation in the selection of committees and their chairmanships, and upon the choice of new trustees based upon their special qualifications for definite usefulness in the respective activities. An important change was the provision that "A Charter Trustee shall retire at the conclusion of the June meeting following his seventieth birthday, and there upon shall become a Trustee Emeritus for life, with the privilege of attending meetings but without vote." The purpose of this change was to retain the wisdom, experience and counsel of elder members and at the same time make room for younger men. Not only must the board be kept active and vigorous, but the changing views and attitudes of succeeding generations must be adequately represented and presented in its deliberations if the University is to keep abreast of a changing world.

This departure, following in part a practice increasingly adopted in other organizations in recent years, was accepted not without some misgivings upon the part of some members of the board. It was felt that the analogy to certain commercial or other

organizations, in which the new procedure presented obvious advantages, was far from perfect when applied to an institution such as Princeton. In the latter case, there were certain intangible factors, such as specialized knowledge and experience, personal familiarity with past history and traditions, sustained interest and support, the loss or even the lessening of which would be severely felt. In arriving at a conclusion, based upon a balancing of the determining factors, the board hoped to offset any possible loss by an urgent request to the Trustees Emeriti that they continue to attend the meetings of the board and participate in its discussions and deliberations.

At the same time that it has been alert to the necessity for desirable change, the board has consciously preserved many of the traditions of the past, even in minor details. Its meetings are marked by a quiet dignity and seriousness of purpose. The members are seated in the order of their seniority. For two hundred years the meetings have been opened and closed with prayer, reflecting the religious atmosphere of our origin. The clerk, or secretary, has always from time immemorial been referred to as "the Clark." Although there is no regulation on the subject, smoking is not indulged in while the meetings are in session, no doubt to the acute discomfort of inveterate devotees of the weed, who suffer in resigned silence.

This is not to say that the board is without its lighter moments. It was the custom for many years to hold the commencement meeting of the board at "Prospect," the residence of the President. This must have been a source of considerable inconvenience to the housekeeping staff, already overburdened with preparation for the usual commencement festivities, for the size of the board necessitated the complete dismantling of the library and the erection of a large square table around which the members sat in their regular order. Upon one such occasion, Mr. John A. Stewart, senior trustee, was seated on the right of President Hibben. Mr. Stewart lived to the ripe age of 104, in remarkable vigor. He continued to attend meetings and, in fact,

ballots solely of alumni living in one of four Regional Districts. Upon the expiration of his four year term, no Alumni Trustee may be reelected until after the expiration of one year, thereby ensuring rotation in office.

The system of Alumni Trustees has presented many advantages. It provides direct representation for the alumni and it also ensures continuous representation of every region in the country. In practice it also develops material for subsequent consideration in the election of Charter Members, as it offers opportunity over a four-year period to measure the ability, interest and availability of prospective candidates. A substantial number of the present Charter Trustees were previously elected by the alumni, or were candidates for election as Alumni Trustees.

The most recent changes in the provisions governing membership on the board came about in 1942, as the result of the deliberations of a Committee on Reorganization which was appointed to review the entire subject. Its report laid particular emphasis upon the desirability of rotation in the selection of committees and their chairmanships, and upon the choice of new trustees based upon their special qualifications for definite usefulness in the respective activities. An important change was the provision that "A Charter Trustee shall retire at the conclusion of the June meeting following his seventieth birthday, and thereupon shall become a Trustee Emeritus for life, with the privilege of attending meetings but without vote." The purpose of this change was to retain the wisdom, experience and counsel of elder members and at the same time make room for younger men. Not only must the board be kept active and vigorous but the changing views and attitudes of succeeding generations must be adequately represented and presented in its deliberations if the University is to keep abreast of a changing world.

This departure, following in part a practice increasingly adopted in other organizations in recent years, was accepted not without some misgivings upon the part of some members of the board. It was felt that the analogy to certain commercial or other

ballots solely of alumni living in one of four Regional Districts. Upon the expiration of his four year term, no Alumni Trustee may be reelected until after the expiration of one year, thereby ensuring rotation in office.

The system of Alumni Trustees has presented many advantages. It provides direct representation for the alumni and it also ensures continuous representation of every region in the country. In practice it also develops material for subsequent consideration in the election of Charter Members, as it offers opportunity over a four year period to measure the ability, interest and availability of prospective candidates. A substantial number of the present Charter Trustees were previously elected by the alumni, or were candidates for election as Alumni Trustees.

The most recent changes in the provisions governing membership on the board came about in 1942 as the result of the deliberations of a Committee on Reorganization which was appointed to review the entire subject. Its report laid particular emphasis upon the desirability of rotation in the selection of members and their chairmanships, and upon the choice of new members based upon their special qualifications for definite use in the respective activities. An important change was the amendment that "A Charter Trustee shall retire at the conclusion of the June meeting following his seventieth birthday, and there shall become a Trustee Emeritus for life, with the privilege of attending meetings but without vote." The purpose of this change was to retain the wisdom, experience and counsel of older members and at the same time make room for younger members. Not only must the board be kept active and vigorous but the changing views and attitudes of succeeding generations must be adequately represented and presented in its deliberations if the University is to keep abreast of a changing world.

This departure, following in part a practice increasingly adopted in other organizations in recent years, was accepted not without some misgivings upon the part of some members of the board. It was felt that the analogy to certain commercial or other

organizations, in which the new procedure presented obvious advantages, was far from perfect when applied to an institution such as *Princeton*. In the latter case, there were certain intangible factors, such as specialized knowledge and experience, personal familiarity with past history and traditions sustained interest and support, the loss or even the lessening of which would be severely felt. In arriving at a conclusion, based upon a balancing of the determining factors, the board hoped to offset any possible loss by an urgent request to the Trustees Emeriti that they continue to attend the meetings of the board and participate in its discussions and deliberations.

At the same time that it has been alert to the necessity for desirable change, the board has consciously preserved many of the traditions of the past, even in minor details. Its meetings are marked by a quiet dignity and seriousness of purpose. The members are seated in the order of their seniority. For two hundred years the meetings have been opened and closed with prayer, reflecting the religious atmosphere of our origin. The clerk, or secretary, has always from time immemorial been referred to as "the Clark." Although there is no regulation on the subject, smoking is not indulged in while the meetings are in session, no doubt to the acute discomfort of inveterate devotees of the weed, who suffer in resigned silence.

This is not to say that the board is without its lighter moments. It was the custom for many years to hold the commencement meeting of the board at "Prospect," the residence of the President. This must have been a source of considerable inconvenience to the housekeeping staff, already overburdened with preparation for the usual commencement festivities, for the size of the board necessitated the complete dismantling of the library and the erection of a large square table around which the members sat in their regular order. Upon one such occasion, Mr. John A. Stewart, senior trustee, was seated on the right of President Hibben. Mr. Stewart lived to the ripe age of 104 in remarkable vigor. He continued to attend meetings and, in fact,

served as Acting President of the University in the interregnum between the terms of President Hibben and President Wilson. Upon his 100th birthday, he insisted on eating lobster and ice-cream, announcing somewhat testily, "Up to this point, the family has insisted upon regarding me as some kind of a record, from now on I am going to enjoy myself." While his mental and physical vigor remained unimpaired, he was almost completely deaf, although he retained a voice of gargantuan power.

Upon this particular occasion, Mr John O H Pitney was on his feet reporting for the committee on finance, of which he was chairman. Mr Stewart leaned over to President Hibben, and in a voice which he evidently intended to be a whisper but which might readily have been heard on Nassau Street, bellowed "Who is that?"

This wholly unexpected explosion halted proceedings and President Hibben, visibly embarrassed, shouted in Mr Stewart's ear, "That is Mr John Pitney."

Mr Stewart, still speaking in the same tone, exclaimed "Why, of course! I know him, I know him well. He is a *very* able man—much abler than his brother the Judge."* Mr Pitney found it difficult to resume his report and the board to smother its levity.

Some of the minor traditions and procedures were subject, on occasion, to judicious circumvention. The Reverend Dr Elijah R Craven was clerk of the board from 1860 until 1908. He took the position very seriously and was never one to permit infractions of the rules. The *Daily Princetonian* prided itself upon the achievement of getting out an elaborate extra edition of the annual commencement exercises, replete with full copies of all addresses and other proceedings, which it had on sale at the door as the audience emerged from the exercises. An important feature of the edition was the long list of prizes, honors and other awards, which were preserved in secret and announced for the first time toward the conclusion of the exercises. Obviously it was essential for the *Princetonian* to obtain a copy in advance.

* Mr Justice Mahlon Pitney of the Supreme Court

But Dr Craven was always adamant and declined to release the list until the conclusion of the meeting of the board of trustees, which preceded the commencement exercises, and at which the awards were officially confirmed. Mr Moses Taylor Pyne was probably Princeton's most beloved alumnus, and being a resident of Princeton, he maintained quite as cordial and affectionate relations with undergraduates as he did with his friends among the alumni. If the undergraduates had a serious problem, they were quite apt to take it to Mr Pyne, assured of a sympathetic hearing. Accordingly, at the commencement meeting, when the resolution had been adopted confirming the awards, Mr Pyne would arise and move unobtrusively to the window, for the ostensible purpose of improving the ventilation, during the course of which proceeding a copy of the list would slip unnoticed out the window. Little did anyone know that underneath the window lurked an anxious but intensely grateful undergraduate editor, who seized the document as it floated down and was off like a flash on his bicycle to the printing office. Some hours later, in his own good time, Dr Craven would release his precious list with the usual formalities on both sides, and it is not recorded whether he ever wondered how the list could have been translated into type with such remarkable speed.

As previously noted, the question is sometimes raised why so large a board of trustees is necessary or desirable. Many institutions in fact, have boards that are considerably smaller. An immediate reason for the size of the board is found in the provision for adding eight Alumni Trustees. Another reason is the desire to make provision for even greater regional representation (the four Regional Alumni Trustees cover the entire country). The paramount reason, however, lies in the fact that the experience of many years is conclusive that we have use, if not pressing need, for the present number. The truth is that historically the Princeton board has always been and is a hard working active board. Any assignment within reason is cheerfully accepted and performed, sometimes at great personal sacrifice. For

example, it is the observation of the writer (who is not a member of the committee and attends only *ex officio*) that the members of the investment committee devote much more intensive attention to the investments of the University than they do to their own. Except in the war years, it has been a rare meeting of the board, large as it is, when there has not been at least 80 per cent in attendance, and frequently the percentage has been higher. Many members have individual attendance records of well over 90 per cent extending over many years. This will explain to Princetonians why so overwhelmingly a proportion of the membership has been selected from Princeton men. As someone has expressed it, 'When there is a job to be done, we don't ask 'em, we tell 'em and they seem to like it.' It has been felt that any danger of inbreeding has been more than offset by the certainty of keen interest and willingness to serve, upon which we can confidently rely. At the same time, this consideration has not deterred us from going outside the body of our own alumni in appropriate instances, with signal success.

In so large a board which meets four times a year, much of the detail work and consideration must necessarily be done in the first instance by committees, the members of many of which can be available for more frequent meetings, sometimes on short notice. Incidentally, this explains why it is desirable to have a considerable portion of the board living within a reasonable distance of Princeton.

The standing committees of the board are as follows: the executive committee and the committees on finance, grounds and buildings, library, curriculum, undergraduate life, health and athletics, honorary degrees.

The duties and functions of these Committees are set forth in detail in the by-laws and for the most part are generally indicated by the title of the respective committee, so that detailed discussion will be omitted, with some reluctance, because of limitation of space. A few comments may be informative.

The executive committee consists of its chairman, who is elected by the board, and the chairmen of the standing committees, together with two members who serve as rotating members for one year each, and two members at large who serve for three years each. The committee therefore serves as a clearing house for the activities of the standing committees, and because of rotation is able to a considerable extent to reflect the views of other members of the board. The by laws provide that "the Executive Committee shall have general charge of the affairs of the Corporation when the Board is not in session and may exercise all the powers of the Board in all matters which in their judgment cannot be delayed until the next meeting of the Board."

The committee on the curriculum meets with a standing committee of the faculty before each stated meeting of the board. The deans are members, *ex officio*, of the respective committees in which their special interest lies.

A committee of great importance is that on investments, which is a sub committee of the committee on finance. It meets regularly throughout the year and constantly reviews the portfolio, bringing to bear a wide range of financial knowledge and information. Its devoted and zealous service is evidenced by the fact that as of December 31, 1946, the endowment of the University showed a market value of \$49,997,895 against a book value of \$44,191,234.

The roster of the chairmanships of these committees during the past half century reveals some outstanding names. An example is Dr. Melancthon Woolsey Jacobus, for many years chairman of the committee on the curriculum. Dr. Jacobus brought to this task a unique combination of qualifications. As president of Hartford Theological Seminary, he was not only a great theologian, but also possessed a wide knowledge and experience in educational matters. He was familiar at first hand with developments at Princeton over the preceding decades, and maintained close and affectionate relationships with members of the faculty. Above all, his warm human qualities and interests, with a quiet

but contagious sense of humor, fitted him admirably for this important assignment, while his common sense and excellent judgment invariably resolved all difficult questions with mutual respect and satisfaction. As an example of the variety of his interests he was, as an undergraduate, a crack third baseman upon the baseball team, and his keenness for the game never slackened. If one attended the first game of the Yale series at New Haven, he invariably found the Doctor in the first row, frequently alone but ready to discuss with zest the fine points of the game. The committee on the curriculum always holds its meetings at Princeton, but on one occasion the members were somewhat mystified by being summoned to a meeting at 11 00 a.m. at the Hotel Belmont in New York. The mystery increased as the chairman proceeded to conduct the business with unusual vigor and dispatch. Finally, one of his contemporaries who sat next to him leaned over and whispered, 'See here, Jake, what's all the rush about?' The Doctor replied behind his hand, "Pssh! I've got a ticket for the World Series!"

Another powerful and much loved figure was Henry B. Thompson, chairman of the committee on grounds and buildings. The condition of the campus was his particular pride and joy. In his frequent trips to Princeton, he never failed to walk the campus and inspect conditions at first hand, and resulting action was vigorous and forthright. Serving with him was Bayard Henry. Both men were giants in physical stature and positive in their views, and it was but natural that they did not agree on all subjects, although the intensity of their interest in the common object would eventually bring them together. Mr. Henry was a strong advocate of large trees and spreading elms upon the campus, while Mr. Thompson supported the University landscape architect, Mrs. Beatrix Cadwalader Farrand, who had a predilection for shrubs, vines and other low planting. In moments of exasperated frustration, Mr. Henry was known to refer to her as "Trixie the Bush-Woman." Incidentally, it may be noted that Mrs. Farrand has never received adequate recognition for the

major part she played in the steady development over a period of years of the beauty of the campus. It was largely a labor of love on her part, at a minimum cost to the University and at considerable personal sacrifice to herself. But the result speaks for itself and for her.

Bayard Henry was also chiefly instrumental in bringing about the removal of the Pennsylvania Railroad station from its age-old position at the foot of Blair Hall steps to its present location, thereby freeing the area now so handsomely occupied by the Class of 1901 Dormitory, the Class of 1904-Howard Henry Dormitory, the Class of 1905-Walter L. Foulke Dormitory, Lockhart Hall, Laughlin Hall and Pyne Hall. Another instance of Henry's interest and foresight will become more apparent as time goes on, for it was his vision which led to the purchase of lands lying south of the Raritan Canal. At least thirty years ago, he was insistent year in and year out that the University should acquire these properties, at a time when funds were not too plentiful and few if any could see the need for extending our holdings beyond the line of the canal at the foot of the hill. Mr. Henry, however, never relaxed his pressure. The title to one of the farms in question was for some time complicated because of the possibility of the birth of future grandchildren, and whenever Mr. Henry came to Princeton one of his first questions would be whether any new grandchildren had appeared. Eventually the properties were acquired and the University now owns continuously to the main highway at Penns Neck. The recent erection of manufactories and other commercial establishments to the east of the highway has provided eloquent proof of the wisdom of this timely purchase.

For some reason the activities of the committee on grounds and buildings provide a forum for some of the most active debates, in which all feel free to take a hand. This is understandable, inasmuch as buildings and grounds are visible, tangible things, with respect to which the keenly interested layman, even without professional architectural or engineering ex-

perience, is moved to express his opinion. One famous debate related to the site of the new library. It raged with unabated vigor over the better part of ten years, notwithstanding the fact that at no time during that period was there money in sight to erect the building. Practically every conceivable site on the campus was successively put forward by ardent supporters, and it is probably little known that at one time the site was definitely fixed by formal resolution of the Board on the south side of McCosh Walk between Prospect and '79 Hall. Even then there was not unanimous and wholehearted agreement, and the situation was not fully relieved until the fortuitous destruction by fire of the School of Science Building, which offered a happy solution upon which all could unite. So general was the satisfaction that some wag hinted that the fire might not have been wholly accidental.

A word might be said regarding the relationship of the trustees to the other constituent factors of the University—notably the administration and faculty, the alumni and the undergraduates. An examination of the ancient provisions of the University's charter and its by laws, many of which go back two hundred years and are still in force, would reveal numerous provisions which if taken literally today, might conceivably become a source of friction between trustees and faculty. The fact is that the day to day operation under these provisions by fair-minded men of good will, working together devotedly toward a common objective of high purpose and with mutual regard for their respective spheres of activity has produced no serious friction. There may be from time to time honest differences of opinion but they are resolved in the give and take of frank and open discussion and mutual respect and confidence. No doubt the basis for this lies in the lifelong and affectionate friendships which many of the trustees enjoy with members of the faculty and administration.

With respect to the alumni, the relationship is even closer and by the same token the interchange of views is even more direct, not to say forthright. After all most of the trustees have always been alumni, and many of them have served previously upon the

THE TRUSTEES

Graduate Council, which is the distinctive and representative body of the alumni. By definite design the two bodies operate entirely separately. No member of the board may be a member of the Graduate Council, nor, for example, by unwritten rule long observed may any trustee take any part in the nomination or election of Alumni Trustees. Nevertheless, there is a close liaison between the two organizations. The trustees lean heavily upon the Graduate Council, notably in such matters as annual giving, with results greatly benefiting the University. The truth is that the Graduate Council has a real advantage and a great opportunity in the far wider field in which it can conduct its operations and explore new possibilities. The trustees are in many matters necessarily the body of final decision and responsibility; they are accordingly subject to definite restrictions and limitations and cannot well afford to risk mistakes. The Graduate Council, however, in exploring new fields, can more readily afford to take chances in its efforts to produce a worthwhile accomplishment. Moreover, it is far better able to conduct a multitude of alumni activities in which trustees can gladly participate but cannot well take a leading part.

The relationship of the trustees with the undergraduates is naturally somewhat more remote, but is nevertheless marked by keen and constant interest. Aside from the general observation of undergraduate activities, one entire meeting of the trustees' committee on undergraduate life is devoted to an evening meeting with the leaders of various phases of undergraduate life, and this frequently proves to be the most interesting meeting of the year. The undergraduates report upon the status of their respective activities and are given the fullest opportunity to voice criticisms or suggestions, which, on occasion, are accepted with alacrity. The mutual exchange is stimulating and enlightening and has frequently resulted in the correction of misunderstandings and the removal of causes of undergraduate dissatisfaction.

Visitors from foreign countries, in particular, frequently express amazement which at times approaches incredulity, at the

picture of a University, free of financial support from the government, providing educational facilities for its students at less than 50 per cent of their actual cost, and looking to its own alumni and other generous private benefactors for the balance of its financial requirements, and thereby maintaining its freedom of mind and action. They further marvel that, with authority legally vested in a board of control, the membership of which is *in large measure drawn from non academic circles, trustees and administration and faculty* can work together in a harmonious relationship in a common undertaking with mutual consideration, respect and regard, and without political influence, or any other undue or unwelcome interference. But there it is—and we hope to keep it so.

When all is summed up, the outstanding characteristic of the Princeton board of trustees and the secret of such success as it has enjoyed in the past five decades, lie in the character and almost fanatical zeal of its members. There may well be defects in the technical organization, and a theoretical expert might well draw a more perfect blueprint. But these features, if they exist, have faded into insignificance as against the force of a body of men working in complete cooperation with singleness of purpose for something that is dear to them and bigger than themselves. The conditions provide one of the few areas of human endeavor which is marked solely by a spirit of altruism and an entire absence of selfish interest. It is little wonder that the members find the association enjoyable and contribute their services with enthusiasm.

Beyond that, Princeton was incredibly fortunate in the character, ability and zeal of the men who constituted the board during the first three decades of the present century. It is perhaps invidious to mention particular names among so many, and in any event those still living will be excluded. But, by way of illustration, there may be cited Moses Taylor Pyne, Cleveland H. Dodge, Cyrus McCormick, Bayard Henry, Charles Scribner, John L. Cadwalader, Alexander Van Rensselaer, Melancthon W. Jacobus,

THE TRUSTEES

Henry B Thompson, William Cooper Procter, Parker D Handy, Edward W Sheldon, John H Pitney, John R Hardin, John M T Finney, Wilson Farrand, Matthew C Fleming, Edward D Duffield—and the list might be extended indefinitely

Was ever any institution blessed with a governing board of greater power or capability ? When to their native abilities there is added that extraordinary zeal and spirit of devoted service which led them to place Princeton first upon the list of their public interests, and to devote unlimited time and effort in her behalf, you have at least a part of the secret of the progress of the University in the last half century

The writer closes as he began, with a guilty feeling that, at least for the objective and unprejudiced reader, he has permitted a note of sentiment to creep in For this he begs indulgence, although he offers no such apology to the Princeton audience Indeed, he derived some slight comfort of justification recently from the following passage in Lord Robert Cecil's life of Melbourne

"There was no doubt that Eton, indolent, high spirited, undisciplined Eton, was the school for him During the rest of his life it was to linger in his memory, tinged with a golden sentiment, so that forty years later, as a gray headed statesman, disillusioned by a life time of glory and agitation, he could never hear a clock like the Eton clock, without a lift of happiness in his heart "

The Alumni

BY CHAUNCEY BELKNAP

ACCORDING to long-standing custom, a week end in early June of each year is given over by Princeton to celebrating the class reunions of its alumni. After watching the more public aspects of one of these celebrations for the first time, a small boy was on his way home with his father, who had been attending his twenty fifth. The youngster looked back on the event with a mixture of delight and bewilderment. The parade around the baseball field before the game with Yale on Saturday afternoon had been the high point for him. Never had he heard so many bands, or seen such costumes. In silence he reviewed them again, one class dressed up in orange and black as terrors, another as Scotsmen in kilts, led by squeaking bag pipers and then there were cossacks, Tyroleans, huntsmen, sailors, and other classes that wore just costumes, without relation to anything previously seen on land or sea. All of these, he had been told, were alumni. After further thought his bewilderment found expression.

"Dad, who are the alumni, really?"

"Why they are old grads, like me."

Finding this not helpful, he tried another approach. "But what makes them act the way they do?"

"That's too hard a one for me, boy, I give up," was the weary reply of his parent, whose example might better have been followed by the writer when called upon to prepare a chapter casting light on these questions, and discussing generally the relations between the University and its alumni.

Any such discussion must be colored by the background and sympathies of the writer. In some colleges the short answer of *administration and faculty* to the small boy's first question would be that the alumni are a headache. Even at Princeton

there may have been times when long suffering members of the committee on admission or disciplinary officers have been tempted to agree with this diagnosis, and it would be a miracle if among our 25 000 alumni there were not some individuals whom the description would fit. But while our faculty have not always suffered alumni gladly, the "headache theory" of alumni relations has not had many adherents at Princeton and the writer may as well admit at once a partiality for his fellow alumni and a charity toward their shortcomings which he will not try to suppress or hide, and for which he makes no apologies.

This bias, though rooted in friendships which have stood the test of time, is not a matter of sentiment alone. It has a firmer basis in observations of many specimens of the genus *alumnus Princetoniensis*, both individually and collectively in their class organizations and alumni associations, during a period of over 30 years. What is more, these observations have been made in accordance with approved scientific methods under a great variety of conditions and environments. At one extreme specimens have been observed in the decorum of a Graduate Council meeting, while at the other end of the range they have been seen, and heard (without need for loud speakers), in the hilarious atmosphere of a fifth reunion tent. Out of the resulting findings the conclusion emerges that while there is no such thing as a typical Princeton alumnus, certain sentiments, attitudes and habits of mind are so widespread among our alumni as to be fairly characteristic of the genus.

No such thing as a typical Princeton alumnus? The murmurs of protest are almost audible. But a moment's reflection is likely to bring agreement. Let us first take the matter of numbers alone. Upon the graduation of the Class of 1920, there were 12 000 living Princeton alumni. As of June 1946, that number had risen to 25 000*. Leaving out of account the temporary increase in undergraduate enrollment during the years immedi-

* Including the holders of graduate degrees

ately following World War II, and assuming a return to the normal pre-war enrollment of 2,400, there will be nevertheless a steady increase in the alumni rolls for a number of years to come. This is inevitable because before 1910 Princeton had never graduated a class of more than 300, whereas beginning with 1925 every class (except in the war years) numbers approximately 600. As the older classes of less than 300 are gradually replaced by the later classes of double that size, the alumni body will keep on growing until it may be expected to level off at a peak of over 30 000 some time in the 1980's. Even with our present 25 000 alumni, it would be a rash undertaking to picture the typical member of a group whose individual backgrounds, interests and points of view differ so greatly.

These differences are in part the result of the broad geographical distribution of the Princeton student body, who scatter even more widely after graduation. Our alumni are far from being a compact local group. While the greatest number live in New Jersey and the neighboring states of New York and Pennsylvania they have made their homes in every state of the union. Many are located in the south, where Princeton's position among the northern colleges has been secure since the early days when James Madison (1771) and "Light Horse Harry" Lee (1773), both of Virginia, were among our most distinguished graduates. In the middle west, Chicago, Cleveland, St. Louis, Detroit and Cincinnati have large Princeton groups. A regional alumni meeting held in St. Louis in 1946, under the auspices of the Graduate Council, drew delegates from all parts of the middle west. Going further west, we find a representative Princeton population which is steadily increasing, especially in California, Colorado and Washington. Outside the United States Princeton men may be found in all parts of the world. The groups in Canada and in London are the largest foreign concentrations, but the latest edition of the *Alumni Directory*, reflecting conditions before they were much affected by World War II, listed addresses for Princeton alumni in over 60 for-

eign countries. So we see that there is no typical Princeton alumnus in any narrow geographical sense.

In addition to being widely distributed geographically, these Princeton men are found in many different walks of life. Business today claims the majority, but 'business' is only a comprehensive term for a variety of pursuits which differ almost as much among themselves as one profession does from another. And in many of these varied occupations which we call 'business,' Princetonians may be found at any level, from chairman of the board to junior clerk or plant apprentice. In the professions law, medicine, the ministry, education, architecture, engineering and journalism have their followers. Twenty-five university and college presidents today are Princeton graduates as were the late deans of the Harvard Law School and of the Harvard Medical School. The time-honored tradition of Princeton men in the public service has been well maintained. To mention a few examples, at this writing one of the United States senators from New Jersey and the governor of Pennsylvania are alumni, the chairman of the executive committee of our board of trustees is a former Assistant Secretary of the Treasury, and during World War II, the Navy Department for a while looked like an extension division of the University, with the Secretary, the Under Secretary and an Assistant Secretary all Princetonians. It is doubtless true that the only one of the arts in which Princeton men are active in significant numbers is literature, but in recent years the theater has been attracting a few, who have won success as actors both on Broadway and in the movies. All of which serves to confirm the view that no one occupation can be regarded as typical of the group.

In their general opinions and interests the alumni also present a more diversified picture than might be supposed. In politics a majority are no doubt Republicans, but our large southern constituency is pretty generally in the opposite camp and the only Princetonians who in our time have reached the Presidency or achieved membership in the national cabinet have been Demo-

crats While it is quite certain that an overwhelming proportion of the alumni believe in free enterprise and the capitalist system, it also must not be forgotten that the Socialist Party's candidate for President in the last five elections has been a Princeton graduate, who, incidentally, holds an honorary degree from the University

Many of the alumni are, by the time they reach middle life at any rate, comfortably off financially, and some have become wealthy But the possession of large means is far from typical of the members of the Princeton family, as any class treasurer knows For a number of years about one third of the undergraduates have worked their way through college, in whole or in part, with or without scholarship aid, and a number of these are the sons of Princeton graduates

There may have been a time when it might be said that Princeton alumni had the same general economic and social background This was an unintended by-product of the rigid admission requirements formerly in effect, which even the best students from a number of the western and southern high schools were unable to meet It is some years, however, since these old requirements were replaced by an admirably flexible policy in regard to admissions which has opened our doors freely to exceptionally promising applicants in spite of limitations in their preparatory education This broadening of the base from which students were drawn coupled with generous scholarship aid after admission, brought into the college new elements of strength and vigor, which are now beginning to count in the alumni ranks By the same token, they add to the difficulty of singling out and describing the typical Princetonian, except in terms of the educated American citizen

While all of our alumni have been at some time students on the Princeton campus, this can hardly be regarded as an experience shared in common unless they were fairly close contemporaries The undergraduate days of our oldest alumni are separated from those of the youngest by some seventy years

This is a short space in the life of a university, but what changes those years have produced at Princeton! The senior group of our alumni, stalwarts whose class numerals run back to the early 'eighties and even further, remember Princeton as a small college of less than 600 students, making promising advances under the leadership of President McCosh. The perennial boys of the golden 'nineties, whose loyalty to the modern Princeton is undimmed and unchallengeable, nevertheless recall with a touch of nostalgia those good old times when studies were not taken too earnestly on the campus. They are followed by a larger group, who in their memories of undergraduate days recall a Princeton responding to the preceptorial system and the stricter academic standards introduced by Woodrow Wilson and reinforced by President Hibben. Following these, in their turn, is the largest group of all, the classes from 1925 to 1940, products of a still more rigorous intellectual discipline under the four-course plan of study. The line ends, for the moment, with the recent war classes, who in spite of all that acceleration and military controls could do to deny them the usual privileges and amenities of student life, nevertheless have shown the high value which they place on their Princeton heritage.

Since each of these groups of alumni knew a different Princeton in student days and their later interests and viewpoints have been so far from uniform, it would be natural for the outsider to ask what magic holds the Princeton clan together. It might have been expected that the relation between university and student would be broken off at the latter's graduation. Then, for better or worse, the university's educational process as applied to the particular individual has been completed. And in the European universities that is the way it works out. American experience, however, has been different. Princeton students do not look upon graduation as ending their relation with the University, but rather as altering the character of a life long tie. They mean it when they sing

Her sons will give, *while they shall live*,
Three cheers for Old Nassau

One striking expression of this feeling is the class memorial insurance program. In the spring of their senior year, a large number of the members of each class take out twenty-year endowment life insurance policies, with annual premiums in proportion to their individual means, for the benefit of the University. In this way, while still undergraduates, they make provision for the collective gift which as alumni they will turn over to the University at their twentieth reunion. As a result of this program, started in 1916, the maturing policies of ten classes have already brought the University nearly \$1 million, and the outstanding policies which are being carried by members of the last twenty classes for the University's benefit amount to another \$1-3/4 million.

For all his generosity (of which other examples will be given later), our average alumnus would still find it hard to define the nature of his relation with the college. True, he is the end product of its educational process. But he seldom feels that this qualifies him to pass judgment on the educational methods it has employed. Indeed, he is likely to be the first to acknowledge that the college is not to blame for the result in his own case. He is aware, if he stops to think about it, that the endowment and other properties of Princeton University are held by the corporation in trust for its educational purposes, and that the responsibility for administering this great trust rests with the board of trustees, of which only eight out of thirty members are elected by the alumni. Until 1900 the alumni had no share in the choice of trustees, and from 1900 to 1922 the authorized number of alumni trustees was five. The original grant of the voting franchise to alumni and the subsequent increase in the number of alumni trustees from five to eight recognized the alumni's legitimate claim to a direct voice in selecting part of those who frame the policies of the University.

Alumni interest in the affairs of the University is constantly growing. Administration and Graduate Council officers know how hard it is getting to be to meet the alumni demand for news from Princeton. The *Alumni Weekly*, excellent as it is in many respects, does not begin to satisfy this hunger for information, and still more information, as to what the University is doing and planning. In response to calls from local alumni associations all over the country, it has become necessary to arrange annual (or more frequent) tours for the president, the deans, and representative faculty members, whose personal appearances to speak and answer questions about Princeton at alumni gatherings have drawn large audiences. There has also been a steady increase in the attendance at the annual Alumni Day meetings in Princeton on Washington's Birthday.

Official publications of the University go out to the alumni in growing numbers. Especially cordial has been alumni approval of the practice started by President Dodds of sending to every alumnus a copy of his annual report to the board of trustees. A busy Princetonian said to the writer "Among all the mass of printed matter which comes in my mail, that report of the President is one thing which I always carry home and read from cover to cover, and never without a thrill of pride." No doubt many others would give the same testimony.

Is all this getting away from our inquiry as to what is the essence of the relation between the University and the alumni? By no means. On the contrary, we are getting at the heart of the matter. Is it not clear from the foregoing that in Princeton affairs alumni opinion is coming to have much the same place that public opinion has in public affairs? Of course, the general alumni body is not qualified to pass judgment on technical questions of educational method. Such matters are the province of the professional educator. But in education as in government, the wisest and most understanding students are in agreement that the determination of general objectives and broad policies should not be handed over to the experts alone. This is the area

in which informed lay opinion may properly have a significant influence

The experts in any field, and education is no exception, may become so intent in debating their rival techniques that they lose sight of the goal in their disputes over methods of reaching it. But the broad outlines of educational policy are settled in the long run by the judgment of the lay public on the product which is turned out, and Princeton alumni keep a particularly vigilant eye on the product of their own alma mater.

Alumni opinion has the strength as well as the weakness of general public opinion. It may at times be short sighted or mistaken, but in the long run it usually corrects its own errors. It is dependent on the quality of its leadership and the adequacy of the information which the University supplies. After all, one of the aims on which Princeton has insisted is the development in its undergraduates of inquiring minds with a capacity for independent judgment. Accordingly, it has been the policy of the University to take the alumni into its confidence at every stage of its progress, and to welcome frank expression of the alumni point of view.

As a rule alumni opinion has supported and encouraged educational progress at Princeton. Woodrow Wilson started the preceptorial system, a costly experiment in education, without having the money in sight to pay for it. The alumni backed him up, and the needed funds came out of their pockets. The next important advance in educational policy at Princeton was the establishment of the four-course plan. This did not place as large a burden on the University budget, but it called for an understanding appreciation of the new requirements in regard to independent study, and the higher standards which accompanied these requirements. Alumni opinion has consistently supported the four course plan.

The immediate lay control of the University, as has been said, lies in the board of trustees. Behind the board, however, and exercising a potent influence on its deliberations, lies this force

of alumni opinion. It is unlikely that any major decision involving the ultimate objectives and broad policies of the University would be made by either the administration or the board, unless it could reasonably count upon alumni support.

Thus the alumni, 25 000 strong, in spite of the absence of official connection with the University, are coming to be regarded along with trustees, faculty and undergraduates, as part of one organic whole. President Dodds was giving natural expression to this unity when he included the alumni in his pledge at the service of dedication following our country's entrance into World War II, saying "In the name of the whole University—undergraduates, *alumni*, trustees, and faculty—I rededicate Princeton University with all its resources to the supreme task which lies ahead."

All of which brings us back to that matter of the characteristic attitudes and habits of mind which hold the secret of whatever favoring magic has touched our alumni relations. To begin with, who will deny the part played by sentiment alone—love for the old campus and for the boys who lived there with us in by-gone days? The writer cannot speak for the younger classes, and it may be that the distance of nearly thirty-five years lends most of the enchantment to his view of undergraduate life in the years just before World War I. But many of the friends of that day are still the friends that count, and where would they rather get together than among the old scenes? In spite of the changes which have come over the face of Princeton, both college and town, it remains a place of beauty and it breathes an air of quiet (reunions excepted). More than 500 Princetonians have chosen to make their homes in the town or among the surrounding hills. There they offer boundless hospitality to a never-failing stream of returning classmates and friends. When these latter are unwilling to impose any longer on the good nature of their hosts, comfortable inns are ready to welcome the guest, where he may truly "bid every care withdraw."

in which informed lay opinion may properly have a significant influence

The experts in any field, and education is no exception, may become so intent in debating their rival techniques that they lose sight of the goal in their disputes over methods of reaching it. But the broad outlines of educational policy are settled in the long run by the judgment of the lay public on the product which is turned out, and Princeton alumni keep a particularly vigilant eye on the product of their own alma mater.

Alumni opinion has the strength as well as the weakness of general public opinion. It may at times be short-sighted or mistaken but in the long run it usually corrects its own errors. It is dependent on the quality of its leadership and the adequacy of the information which the University supplies. After all, one of the aims on which Princeton has insisted is the development in its undergraduates of inquiring minds with a capacity for independent judgment. Accordingly, it has been the policy of the University to take the alumni into its confidence at every stage of its progress, and to welcome frank expression of the alumni point of view.

As a rule alumni opinion has supported educational progress at Princeton. Woodford's preceptorial system, a costly experiment having the money in sight to pay for it up, and the needed funds came out of the important advance in educational policy at the establishment of the four-year plan. This placed a burden on the University, but it required a standing appreciation of the requirements of independent study, and these requirements. A four-course plan has

The immediate lay control lies in the board of trustees, the University exercising a potent influence.

During the darkest days of World War II, the newspapers carried the story of how Winston Churchill had laid aside his cares to find refreshment in a visit to Harrow, his old school. Like this famous old Harrovian, many a Princetonian has found rest and freedom from his lesser tribulations in a few days' retreat amidst the tranquil scenes and happy memories of his college days.

Undoubtedly there are some alumni for whom the football team has been their principal continuing link with Princeton. Many can claim unbroken records of attendance at Yale games for twenty five, thirty—and yes, for forty-five—years. They may have heard that the modern undergraduate perversely rates a Phi Beta Kappa key ahead of a "P." But have eleven Phi Beta Kappa men ever brought cheering thousands to their feet as they forced a senior thesis over the goal line at the end of a gruelling battle of brains? How can an old fellow—or a young one, for that matter—have a better time than by going down to Princeton to see the team, on a sparkling November afternoon with enough frost in the air, and enough excitement on the field to make his blood tingle again? He wants the team to win, too, and if it doesn't, he may inflict upon some unwary victim an endless post mortem, from which it would appear that after the committee on admission had excluded every promising football player who tried to enter Princeton, the others were flunked out by a relentless faculty the night before the game.

But this is hardly representative of present-day alumni opinion on intercollegiate football at Princeton. The average alumnus is no advocate of financial subsidies or academic favors for football players. He approves the new dispensation under which the Princeton schedule will be made up of games against teams maintaining academic standards as high as our own. The alumni participate in the development of the athletic program, through two representatives elected by the Graduate Council to serve on the University Council on Athletics. The alumni and the University administration are in accord in their belief that no team

should be sent on the field to represent Princeton without proper coaching, and that with adequate preparation, Princeton teams will continue to win their fair share of victories. About the only concession that the alumni ask of their faculty friends is their admission that a winning football team is not necessarily a reproach to an institution of learning.

For most of our alumni the bond which holds them to Princeton is something more than a matter of sentiment or football enthusiasm. It is a combination of pride in the past record of the college and its graduates, and interest in helping to preserve and advance the prestige which it enjoys today. In this Bicentennial year, when Princeton men are recalling their proud lineage and looking back to their forebears of colonial and revolutionary days, the main emphasis of their thinking is on what lies ahead. For an increasing group of alumni, Princeton is becoming an important focus of their mature interest. As time goes on, there is reason to expect that this circle will be further enlarged and that more of our alumni will have an opportunity to participate actively in Princeton affairs. Experience has shown that they will rise to their responsibilities and that Princeton has much to gain by enlisting their thinking as an aid in the solution of its problems.

How much of the alumni interest in Princeton matters is spontaneous, and how much is the result of organization? That is a hard question for anyone to answer, and opinions on it will differ. In the view of this writer, organization has been helpful, in greater or lesser degree depending on whether or not it has been soundly planned, but organization has not been as important as the material it has been able to draw upon. Princeton's strength lies in its vast reserves of alumni good will. In using this great asset to best advantage for the benefit of the University, it has been found that the Princeton alumnus is an individualist. He does not take kindly to regimentation or highly organized pressure. The most effective type of alumni organiza-

During the darkest days of World War II, the newspapers carried the story of how Winston Churchill had laid aside his cares to find refreshment in a visit to Harrow, his old school. Like this famous old Harrovian, many a Princetonian has found rest and freedom from his lesser tribulations in a few days' retreat amidst the tranquil scenes and happy memories of his college days.

Undoubtedly there are some alumni for whom the football team has been their principal continuing link with Princeton. Many can claim unbroken records of attendance at Yale games for twenty-five, thirty—and yes, for forty five—years. They may have heard that the modern undergraduate perversely rates a Phi Beta Kappa key ahead of a 'P'. But have eleven Phi Beta Kappa men ever brought cheering thousands to their feet as they forced a senior thesis over the goal line at the end of a gruelling battle of brains? How can an old fellow—or a young one, for that matter—have a better time than by going down to Princeton to see the team, on a sparkling November afternoon with enough frost in the air, and enough excitement on the field, to make his blood tingle again? He wants the team to win, too, and if it doesn't, he may inflict upon some unwary victim an endless post-mortem, from which it would appear that after the committee on admission had excluded every promising football player who tried to enter Princeton, the others were flunked out by a relentless faculty the night before the game.

But this is hardly representative of present day alumni opinion on intercollegiate football at Princeton. The average alumnus is no advocate of financial subsidies or academic favors for football players. He approves the new dispensation under which the Princeton schedule will be made up of games against teams maintaining academic standards as high as our own. The alumni participate in the development of the athletic program, through *two representatives elected by the Graduate Council to serve on the University Council on Athletics*. The alumni and the University administration are in accord in their belief that no team

should be sent on the field to represent Princeton without proper coaching, and that with adequate preparation, Princeton teams will continue to win their fair share of victories. About the only concession that the alumni ask of their faculty friends is their admission that a winning football team is not necessarily a reproach to an institution of learning.

For most of our alumni the bond which holds them to Princeton is something more than a matter of sentiment or football enthusiasm. It is a combination of pride in the past record of the college and its graduates, and interest in helping to preserve and advance the prestige which it enjoys today. In this Bicentennial year, when Princeton men are recalling their proud lineage and looking back to their forebears of colonial and revolutionary days, the main emphasis of their thinking is on what lies ahead. For an increasing group of alumni, Princeton is becoming an important focus of their mature interest. As time goes on, there is reason to expect that this circle will be further enlarged and that more of our alumni will have an opportunity to participate actively in Princeton affairs. Experience has shown that they will rise to their responsibilities and that Princeton has much to gain by enlisting their thinking as an aid in the solution of its problems.

How much of the alumni interest in Princeton matters is spontaneous, and how much is the result of organization? That is a hard question for anyone to answer, and opinions on it will differ. In the view of this writer, organization has been helpful, in greater or lesser degree depending on whether or not it has been soundly planned, but organization has not been as important as the material it has been able to draw upon. Princeton's strength lies in its vast reserves of alumni good will. In using this great asset to best advantage for the benefit of the University, it has been found that the Princeton alumnus is an individualist. He does not take kindly to regimentation or highly organized pressure. The most effective type of alumni organiza-

tion has proved to be one which is simple, informal, flexible and decentralized

For example, take the National Alumni Association. If the average alumnus ever has heard of it, he takes its existence as much for granted as his own. Its history runs back to the Alumni Association of Nassau Hall, organized in 1826 with James Madison as its first president. Its membership by definition includes all who have been matriculated students at the University, both graduates and non graduates. There is no machinery for admission to membership, and there are no dues. The only meetings are the informal gatherings at Princeton on Alumni Day and Baccalaureate Sunday. Not many of those present on these occasions think of them as association meetings.

The activities of the association are regulated by the Graduate Council. Succeeding the former alumni Committee of Fifty in 1909, the council as the mouthpiece and legislature of the alumni body has become an influential factor in Princeton affairs. It is important, however, to distinguish between its influence, which is considerable, and its power, which (aside from matters of alumni organization) is nil. Some might suppose that this absence of power in University affairs would promote a feeling of irresponsibility in the council, but the effect has been directly opposite. Since the council's proposals and recommendations must win approval on their merits, they are usually models of painstaking care and study.

The council membership has a high level of initiative and ability. Averaging considerably younger than the board of trustees, the members of the council yield nothing to the senior body in the active and intelligent interest and attention which they give to all that is properly their concern. They are equally careful to avoid trespassing in areas where alumni activity, however well intentioned, would be out of place. They have too much respect for the Princeton faculty, and too much regard for its contribution to the educational primacy of the college, to invade the field of the professional educator. In short, they do not

claim that the council should run the college, or that the alumni know all the answers (even when it comes to football) If there are sceptics, unfamiliar with the Princeton scene, who suspect that this picture must be overdrawn because it is so foreign to their own experience elsewhere, they are respectfully invited to look at the record

How is the council membership made up? In the first place, each class and each local alumni association (of which more than eighty are now recognized) elects one council representative This group forms the backbone of the council In accordance with the idea of keeping the organization flexible and decentralized, each class and association chooses its representative in its own way, and decides how long he shall serve The classes are becoming educated to the importance of electing their best available men as council representatives In addition to this group, the council itself chooses twenty-five members at large, who serve for staggered terms of five years Each academic department of the University is entitled to a representative on the council, chosen by the advisory council for the department There are also a few honorary and life members

The council meetings, held in Princeton twice a year, draw a usual attendance of well over a hundred who are by no means limited to those living within easy traveling distance On these occasions, in addition to committee reports and remarks by the deans and other administrative officers, the program ordinarily includes a comprehensive review of the current affairs of the University by President Dodds The value which he places on these contacts with representatives of the whole alumni body has been repeatedly emphasized in the President's remarks From the beginning of his administration, he has given the council his friendly aid and encouragement at every turn

Between meetings, the council's activities are directed by its executive committee, which includes the council officers and the chairmen and vice chairmen of its standing committees In practice, the council has favored a fairly rapid rotation of per

sonnel in these offices. While this has some disadvantages, it has great value in enlarging the group of alumni who gain a first hand knowledge of what is going on at Princeton. These offices have also been a useful proving ground of potential material for the board of trustees.

The Graduate Council office in Nassau Hall is one of the busiest spots on the Princeton campus. Under the direction of the council's secretary, a full time salaried executive, this office is primarily a service center offering prompt and efficient help, not only to the council officers and committees, but to every class and local alumni organization. No job is too big for the council office to tackle, and no chore is too small if it will help in the alumni picture. Is there a new class secretary who wants to know about his duties? The council office has a booklet for him, distilling the accumulated experience of many others who have been successful in the same task. He is welcome to come to the council office for advice, to look over its extensive files for suggested mailing pieces, and to turn over to the office his printing and mailing work. Does the Alumni Association of New England want a Princeton speaker for its annual dinner? The council office will provide one. At the same time, the council office is never intrusive. Any class or association is free to run its own affairs in its own way, and many do so, without benefit of help from the council office.

One of the heaviest responsibilities of the council office is to maintain and keep up to date the central file of alumni names and addresses, and to bring out the volumes of the *Princeton University Alumni Directory*, normally issued every three years. This publication, which in its latest edition ran to 890 pages, is much more than an alphabetical list of names and addresses. Classifying the alumni according to their dates of graduation, degrees, places of residence, and occupations, it is a mine of Princeton information. During World War II, the council office also issued four editions of a *Directory of Princeton Alumni in the Armed Forces of the United States*. Another special

war activity of the office was the maintenance of the Princeton Personnel Index. A questionnaire circulated to every alumnus invited the enrollment of those who desired to enter any branch of the service, with occupational information showing their experience and technical qualifications. Approximately 5,000 alumni were so enrolled in the Index, of whom more than 3,000 found opportunities for war service. Since the end of the war, the operations of the Index have been reversed, and the organization has been occupied with finding civilian employment for the demobilized alumni.

Much of the best work of the council is done by its committees. One of the important committee responsibilities is the presentation of nominees for the alumni trustee elections. Each year two alumni trustees are elected for a four-year term, one designated as a trustee at large, for whom all alumni are entitled to vote, and one regional trustee, chosen by the alumni living in one of the four regions into which the country has been divided for this purpose. This plan insures trustee representation for the outlying geographical areas. Suggestions for nominees, received from a great variety of sources, are sifted by the nominating committee with the utmost care in order to present annually a truly representative ticket. So well has this been accomplished that only once has there been resort to the alternative method of nomination by petition. It is also a tribute to the work of these nominating committees that of the present twenty-two charter trustees of the University, other than *ex officio* members, twelve were former nominees (successful or unsuccessful) for alumni trustee.

Graduate Council committee reports often have helped to form University policies. Most recently, the problems connected with resuming extra-curricular student activities after their suspension during World War II were discussed in an illuminating report of the committee on undergraduate activities which laid the groundwork for action by the University authorities in this field.

sonnel in these offices. While this has some disadvantages, it has great value in enlarging the group of alumni who gain a first hand knowledge of what is going on at Princeton. These offices have also been a useful proving ground of potential material for the board of trustees.

The Graduate Council office in Nassau Hall is one of the busiest spots on the Princeton campus. Under the direction of the council's secretary, a full time salaried executive, this office is primarily a service center offering prompt and efficient help, not only to the council officers and committees, but to every class and local alumni organization. No job is too big for the council office to tackle, and no chore is too small, if it will help in the alumni picture. Is there a new class secretary who wants to know about his duties? The council office has a booklet for him, distilling the accumulated experience of many others who have been successful in the same task. He is welcome to come to the council office for advice, to look over its extensive files for suggested mailing pieces, and to turn over to the office his printing and mailing work. Does the Alumni Association of New England want a Princeton speaker for its annual dinner? The council office will provide one. At the same time, the council office is never intrusive. Any class or association is free to run its own affairs in its own way, and many do so without benefit of help from the council office.

One of the heaviest responsibilities of the council office is to maintain and keep up to date the central file of alumni names and addresses, and to bring out the volumes of the *Princeton University Alumni Directory*, normally issued every three years. This publication, which in its latest edition ran to 890 pages, is much more than an alphabetical list of names and addresses. Classifying the alumni according to their dates of graduation, degrees, places of residence, and occupations, it is a mine of Princeton information. During World War II, the council office also issued four editions of a *Directory of Princeton Alumni in the Armed Forces of the United States*. Another special

THE ALUMNI

war activity of the office was the maintenance of the Princeton Personnel Index. A questionnaire circulated to every alumnus invited the enrollment of those who desired to enter any branch of the service, with occupational information showing their experience and technical qualifications. Approximately 5,000 alumni were so enrolled in the Index, of whom more than 3,000 found opportunities for war service. Since the end of the war, the operations of the Index have been reversed, and the organization has been occupied with finding civilian employment for the demobilized alumni.

Much of the best work of the council is done by its committees. One of the important committee responsibilities is the presentation of nominees for the alumni trustee elections. Each year two alumni trustees are elected for a four-year term, one designated as a trustee at-large, for whom all alumni are entitled to vote, and one regional trustee, chosen by the alumni living in one of the four regions into which the country has been divided for this purpose. This plan insures trustee representation for the outlying geographical areas. Suggestions for nominees, received from a great variety of sources, are sifted by the nominating committee with the utmost care in order to present annually a truly representative ticket. So well has this been accomplished that only once has there been resort to the alternative method of nomination by petition. It is also a tribute to the work of these nominating committees that of the present twenty-two charter trustees of the University, other than *ex officio* members, twelve were former nominees (successful or unsuccessful) for alumni trustee.

Graduate Council committee reports often have helped to form University policies. Most recently, the problems connected with resuming extra curricular student activities after their suspension during World War II were discussed in an illuminating report of the committee on undergraduate activities, which laid the groundwork for action by the University authorities in this field.

A study initiated by another council committee led to action by the board of trustees just before the War approving a plan for the creation of advisory councils for the various departments and academic divisions of the University. The councils are appointed by the board of trustees on the nomination of the departments or divisions concerned after consultation with representatives of the Graduate Council. Membership is not limited to alumni but each council is required to include alumni members and in practice most of the councils have had a majority of alumni. Each council may appoint one of its alumni members as the representative of its department on the Graduate Council. As their name implies these councils have purely advisory functions. In their relations with the respective University departments to which the council members owe their nominations there can be no possible threat against Princeton's cherished ideal of academic freedom. Professor Emeritus Charles G. Osgood long an ornament of the University faculty has written of that sort of fundamental substratum that concrete reinforcement which men whose traffic is in ideas find in men of success in practical affairs. If a departmental advisory council achieves its purpose it will bring to the faculty of the department in fullest measure the concrete reinforcement of which Professor Osgood speaks.

Digressing for a moment we should say that the plan for departmental advisory councils owed much in its conception and development to such informal and unofficial groups as the Friends of the Princeton Library. Made up largely though not exclusively of alumni the Friends have helped to increase the Library book collections and were the original sponsors of the University's Graphic Arts Program. Their quarterly journal *The Princeton University Library Chronicle* now in its seventh year of publication has made many friends among book lovers.

To return to the activities of the Graduate Council—back in 1934 a special council committee appointed to survey the scholarship and student loan situation at Princeton brought in an

THE ALUMNI

unusually able report pointing out the urgent need for additional scholarships, the types of scholarships required, and recommending a program for raising the necessary funds. After serving as a guide for University policy for more than ten years, this report and the questions which it considered were recently reviewed by another council committee, which has now made its report suggesting some changes in the program. One striking feature of the second report is its showing that in the brief interval between the two reports, Princeton received more funds for scholarship endowment than the total which had been accumulated for this purpose down to 1934. It is true that some of this increase would have come to us anyway, but it is fair to say that a substantial part of the gain may be attributed to the program laid out in the council's first report.

Compared with many other colleges, Princeton was slow in starting an annual giving program. It was not until 1938 that the late Edward D. Duffield '92, then chairman of the board of trustees, asked for the council's advice on undertaking an annual giving project at Princeton, and inquired whether the council would be willing to act as its sponsor. The council replied that in its opinion a soundly conceived and administered program of annual giving might well become in course of time an outstanding expression of alumni loyalty to Princeton, and that the council would be happy to sponsor it if a competent salaried executive with professional experience in fund raising, was placed in charge. The council's recommendations were carried out when the Princeton University Fund was organized, with annual giving as an important feature of its program. One of the council's representatives on the Fund has always acted as chairman of its annual giving committee, and the council has accepted a special responsibility for this part of the Fund's work. Annual giving receipts, starting with \$80,000 in 1940, have increased year by year to reach over \$216,000 in 1946. During the same period the number of contributors rose from 3,440 to 8,440. Remember that at all times the class memorial

insurance premiums of twenty-one classes were a first claim on their membership, and the full meaning of these figures will be appreciated. In 1946, adding the insurance contributors to the other annual givers, we had over 11,600 alumni making payments totalling \$375,000 for the benefit of Princeton, on a recurrent annual basis. The council's anticipation of the place of annual giving in the Princeton picture is already in process of being realized.

One reason for the success of the annual-giving program is that the solicitation through class agents gives it a firm underpinning. For the individual classes are the solid bedrock of all alumni organization at Princeton. Where is the Princetonian who will try to put into words all that his class and his classmates mean to him? He knows it was chance that brought them together on the Princeton campus in their particular year. But he thanks his lucky stars that his lot was not cast with the class ahead or the class behind. He knows that some of his classmates are not quite perfect. But you had better keep quiet about their shortcomings if you are not one of the class, and if you are, you won't need this admonition. Inside the class, little heed is paid to the rewards which come to its members from the outside world unless such rewards happen to confirm the surer judgment of the class. Then there is rejoicing in the fold for the man who has made good.

No wonder that the classes come back to their reunions in such numbers. What is so rare as a *Princeton* day in June, down at class headquarters, with each train from the Junction bringing in more of the boys? Whether it is the fifth reunion under a tent, or the twenty-fifth with all of the comfort and other trimmings of a week end at a country club, it is the returning classmates that count. The reunions every fifth year are the largest, but there are also classes which have permanent headquarters in Princeton, and come back to occupy them every June, in addition to holding open house in them during the

year, when a football game or similar occasion furnishes the excuse

As has been said, each class makes its own rules as to organization. Every class has a president and a secretary, and many have in addition a vice president and a treasurer. In the larger classes, it is also common to have an executive committee or similar group, which meets periodically to dispose of class business. Sometimes the officers serve for life, but in most of the later classes five-year terms are the ordinary rule. The secretary is usually the hardest working officer. His is the task of keeping in touch with every one of his classmates, however far afield they may wander. He reports in the columns of the *Alumni Weekly* their marriages and the arrival of their children—yes, and grandchildren too—and their daily doings of all sorts. Fortunate is the class whose secretary looks upon his job as a labor of love, and many are the classes who remember such secretaries with gratitude and benediction.

The importance of the class organizations does not detract from the position of the local alumni associations, which have sprung up both in this country and abroad, wherever Princeton men are gathered together in appreciable numbers. In addition to more than eighty associations in the United States, the Graduate Council office listed just before the war the Princeton Alumni Association of England, the Princeton Club of Paris, the Princeton Alumni Association of Syria, the Princeton Club of the Himalayas, and, believe it or not, the Princeton Alumni Association of Japan.

The local alumni association is an invaluable outpost of Princeton influence in its own vicinity. As a result of its missionary work, many promising students have come to Princeton. For a number of these boys, the means of attending Princeton have been furnished by the eighteen regional scholarships established or currently maintained by local associations and awarded under trustee regulation by a University committee on scholarships. In many of the University's fund raising projects, and

notably in the recent campaign for the new Library, success would have been impossible without the generous support received through these associations and their regional committees

The local alumni associations are awake to the fact that Princeton soon will be no more than an overnight plane hop from any point in the United States. Travel time and mileage once such obstacles to the boy living on the Pacific coast who wanted to come to Princeton, are hardly a factor today. The trip from Seattle takes no longer than the trip from Pittsburgh did a few years ago. What does this mean for Princeton alumni? It means that their home town, wherever it may be, is no longer too far away to be considered seriously as potential Princeton territory. For many local associations formerly suffering under the handicap of their distance from Princeton, it opens an opportunity to give greater help in extending the national distribution of our student body.

Wherever Princetonians may be, the news of the college follows them in the columns of the *Princeton Alumni Weekly*, which comes out regularly during the academic year. The *Weekly* is a continuation of the *Alumni Princetonian*, which was founded in 1894. It is published by the Princeton University Press, and its editorial policy is controlled by a board of editorial direction in which representatives chosen by the Graduate Council are in the majority. Besides the personal alumni notes supplied by the class secretaries, the *Weekly* carries the text of all important statements of University policy by the President and other officers of the administration, and reports all athletic events and other matters of alumni interest. There is also a page of editorial comment and a letterbox where room is always found for alumni gripes, regardless of whose toes may be stepped on. During World War II a large part of the *Weekly's* reduced allowance of devotedness to the heroism and sacrifices of the in the The *Princeton Alumni Weekly* on ar

college publications. The best evidence of its standing with Princeton alumni is the fact that 56 classes have taken group subscriptions, paid for out of the class treasury, and insuring the receipt of the *Weekly* by every man in the class.

Some of our most distinguished Princetonians are holders of graduate degrees only. They entered the Princeton Graduate School after taking their college work elsewhere, and it always has been our policy to respect their prior loyalties to the institutions where they spent their undergraduate days. From recent developments, however, it would appear that this attitude may have been carried too far, and that many of these men feel that they have been treated too much as stepchildren in the Princeton family. They have been enlisted for service on the departmental advisory councils, and they have responded to other calls from the University. Now a representative group of the holders of higher degrees, with the encouragement of Dr. Taylor, dean of the Graduate School, have suggested a closer tie with the University, and more specific recognition of their place as alumni. The Graduate Council has welcomed this approach, and it is expected that in the near future a plan will be worked out which will leave no doubt as to the position of Graduate School degree holders in the Princeton alumni ranks.

Princeton owes much of its eminence to those of its own graduates who have returned and taken positions of leadership in its administration and faculty. This group included, in an older generation, Presidents Wilson '79 and Hibben '82, Dean West '74, Dean Fine '80, Dean Magie '79, Henry van Dyke '73, Allan Marquand '74, William Berryman Scott '77 and many other famous Princeton names. At the present writing, among the alumni who have an official connection with the University are the president, Harold W. Dodds, A. M. 1914, the vice-president, George A. Brakeley '07, the secretary, Alexander Leitch '24, the dean of the faculty, J. Douglas Brown '19, the dean of the School of Engineering, Kenneth H. Condit '13, the dean of the College, Francis R. B. Godolphin '24, and the chairmen

of seven of the academic departments. The role of the board of trustees in Princeton affairs is described in another chapter of this book. All but two of the present charter trustees are alumni, and the proportion has been equally great for many years. To the alumnus, board membership offers the crowning opportunity for service to his alma mater.

During the anxious days of the depression of the early 'thirties, this writer was present at a meeting of the trustees of a scientific research institution whose name is known all over the world. The budget was up for consideration. The finance committee already had reported a great shrinkage of income, and a shocking decline in the market value of the once great endowment (the gift of a single donor). In this emergency, the question was raised whether the level of research activity should be maintained by drawing on the capital funds, which the terms of the donor's gift permitted. In the course of the discussion of this question the chairman said: "Gentlemen, before you approve the use of part of our capital to keep up our current work, let me remind you of one great difference between this organization and the universities many of you also are connected with. We have no alumni to make good our losses. Our endowment has seemed generous by any standard, but it is all we have. So let us beware of taking chances which might permanently undermine this institution."

Against any such threat, the alumni of Princeton are its shield and buckler. We have had notable gifts from individual graduates and their families, such as Henry Stafford Little, 1844; Isaac C. Wyman, 1848; David B. Jones, '76; Thomas D. Jones, '76; Moses Taylor Pyne, '77; Cleveland H. Dodge, '79; Cyrus H. McCormick, '79; William Cooper Procter, '83; William Church Osborn, '83; Edgar Palmer, '03; Herbert L. Dillon, '07; and Harvey S. Firestone, Jr., '20. But Princeton has had no great single benefactor, like John D. Rockefeller for Chicago, or John Sterling for Yale, or Edward S. Harkness for Harvard. Our main reliance has been on the smaller gifts of the many,

THE ALUMNI

and this reliance has not been misplaced. Most of the buildings on the Princeton campus are the gifts of alumni or their families. Many classes, either alone or in combination with others, have given dormitories which bear their numerals, or are named in memory of a deceased classmate. No one thumbing over the pages of the *University Catalogue* which list the endowed professorships, scholarships, and similar funds can fail to be impressed by the number which have been contributed by alumni, and particularly by the co operative effort of alumni.

President Dodds has told the story of how, as he stood watching the flames destroy the old Gymnasium in May 1944, his regret at the loss of the building and its precious collection of athletic trophies was tempered by a feeling of confidence that somehow, somewhere, in the Princeton family the funds would be found for a new building. His confidence spoke from a deep understanding of the place which Princeton holds in the minds and hearts of her alumni. Already, with the generous aid of an alumnus, the new Gymnasium is nearing completion, and it will be larger and better equipped than the old. Simultaneously, construction is going forward on a new Library, also made possible in the main by alumni donations, large and small, including a number of class funds. Overlooking the Library site stands the University Chapel, built not long ago with funds which again came largely from alumni sources. In these three great buildings, the sons of Old Nassau have raised symbols of their faith in the idea of an education which touches the whole man, quickening body, mind and spirit—the idea of a Princeton education.